

# LFD DISPLAY User Manual

MD32C MD40C MD46C MD55C

The color and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

BN46-00098S-03

#### Before Using the Product

Copyright	7
Safety Precautions	8
Symbols	8
Cleaning	8
Storage	9
Electricity and Safety	9
Installation	10
Operation	12

#### Preparations

Charleing the Contents	15
Checking the Contents	15
Removing the Packaging	
(for MD32C MD40C and MD46C models only)	15
Removing the Packaging (for MD55C models	
only)	16
Checking the Components	17
Parts	19
Control Panel	19
Anti-theft Lock	22
Remote Control	23
Before Installing the Product (Installation	
Guide)	26
Tilting Angle and Rotation	26
Ventilation	26
Dimensions	27
Installing the Wall Mount	28

Installing the Wall Mount Kit	28
Wall Mount Kit Specifications (VESA)	28
Remote Control (RS232C)	30
Cable Connection	30
Connection	33
Control Codes	34

# Connecting and Using a Source Device

Before Connecting	43
Pre-connection Checkpoints	43
Connecting to a PC	44
Connection using the D-SUB cable (Analogue	
type)	44
Connection using a DVI cable (Digital type)	44
Connection Using an HDMI-DVI Cable	45
Connection Using an HDMI Cable	45
Changing the Resolution	46
Changing the Resolution on Windows XP	46
Changing the Resolution on Windows Vista	46
Changing the Resolution on Windows 7	47
Changing the Resolution on Windows 8	47
Connecting to a Video Device	48
Connection Using the AV Cable	48
Connection Using the component Cable	48
Connection Using an HDMI-DVI Cable	49
Connection Using an HDMI Cable	49
Connecting to an Audio System	50

Connecting the network box (Sold		
separately)	51	
MagicInfo	51	
Changing the Input source	53	
Source	53	

#### Using MDC

Configuring Settings for Multi Control	54
Configuring settings for Multi Control	54
MDC Programmeme Installation/	
Jninstallation	55
nstallation	55
Jninstallation	55
What is MDC?	56
Connecting to MDC	56
Connection Management	59
Jser Login	60
Auto Set ID	61
Cloning	62
Command Retry	63
Getting Started with MDC	64
Main Screen Layout	65
Menus	65
Screen Adjustment	67
Advanced features	70
Sound Adjustment	72
System Setup	72
Tool Settings	81

84

100

101

Other Functions

Colour Space

White Balance

Group Management	85
Schedule Management	87
Troubleshooting Guide	89
Screen Adjustment	
Picture Mode	91
If the input source is PC, DVI	91
If the input source is AV, Component, HDMI	91
Backlight / Contrast / Brightness /	
Sharpness / Colour / Tint (G/R)	92
Screen Adjustment	93
Picture Size	93
Position	95
Zoom/Position	95
PC Screen Adjustm	96
Resolution Select	96
Auto Adjustment	97
Rotation	97
Aspect Ratio	98
Advanced Settings	99
Dynamic Contrast	100
Black Tone	100
Flesh Tone	100
RGB Only Mode	100

Reset Picture	105
Dynamic Backlight	105
Motion Plus (for MD55C models only)	104
Film Mode	104
HDMI Black Level	104
MPEG Noise Filter	103
Digital Noise Filter	103
Colour Temp.	103
Colour Tone	103
Picture Options	102
Motion Lighting	101
Gamma	101
10p White Balance	101

#### Sound Adjustment

Sound Mode	106
Sound Effect	107
Speaker Settings	108
Reset Sound	109

#### Network

Network Settings	110
Connecting to a Wired Network	110
Wired Network Settings	11
Connecting to a Wireless Network	112
Wireless Network Setting	113
Manual Network Setup	113
WPS(PBC)	114
Network Status	115
Wi-Fi Direct	115
Soft AP	110
AllShare Settings	110
Device Name	110

#### System

Multi Control	117
Configuring settings for Multi Control	117
Time	118
Clock Set	118
Sleep Timer	118
On Timer	119
Off Timer	120
Holiday Management	120
Menu Language	121
Rotate menu	122
<b>Eco Solution</b>	123
Energy Saving	123
Eco Sensor	123
No Signal Power Off	123
Auto Power Off	123
Security	124
Safety Lock	124
Button Lock	124
Change PIN	124
PIP	125
Auto Protection Time	126
Screen Burn Protection	127
Pixel Shift	127
Timer	128
Immediate display	129
Side Grey	129

Ticker	130
Video Wall	131
Video Wall	131
Format	131
Horizontal	131
Vertical	132
Screen Position	132
Source AutoSwitch Settings	133
Source AutoSwitch	133
Primary Source Recovery	133
Primary Source	133
Secondary Source	133
General	134
Max. Power Saving	134
Game Mode	134
BD Wise	134
Menu Transparency	134
Sound Feedback	135
Auto Power	135
Standby Control	135
Lamp Schedule	136
OSD Display	136
Power On Adjustment	136
Temperature Control	136
Anynet+ (HDMI-CEC)	137
Anynet+ (HDMI-CEC)	137
Auto Turn Off	138
DivX® Video On Demand	141
Play Mode	141

lagic Clone	142
eset System	142
eset All	143
C module power	143
ynced power-on	143
ynced power-off	143

#### Support

Software Update	144
By USB	144
Contact Samsung	145
Contents Home	146
MagicInfo Lite	146
MagicInfo Premium S	146
MagicInfo Videowall S	146
AllShare Play	147
Source	147

#### AllShare Play

What is AllShare Play?	148
Read the following before using AllShare Play	
with a USB device	148
Using a USB device	150
Connecting to a PC over a network	151
Using the AllShare Play features	152
Using the Basic AllShare Play Features	153
Sorting the file lists	153
Playing Selected Files	154
Copying Files	154
Creating a Playlist	154
My list	155
My list options	155
Videos	156
Playing a Video	156
Photos	157
Viewing a Photo (or Slide Show)	157
Music	158
Playing Music	158
Videos / Photos / Music Play Option menu	159
Supported Subtitle and AllShare Play file	
formats	161
Subtitle	161
Supported image resolutions	161
Supported music file formats	162
Supported Video Formats	162

#### MagicInfo Lite

File Formats Compatible with	
MagicInfo Lite player	164
Read before using MagicInfo Lite player	
Approving a connected device from the	
server	169
MagicInfo Lite	171
MagicInfo Lite player	
Local Schedule Manager	
Content manager	
Settings	
When Content is Running	

#### MagicInfo Premium S

File Formats Compatible with MagicInfo		
Premium S Player	187	
Read before using MagicInfo Premium S Player		
Approving a connected device from the		
server	193	
MagicInfo Premium S	195	
MagicInfo Premium S Player	195	
Local Schedule Manager	198	
Template Manager	205	
Content manager	208	
Settings	210	
When Content is Running	212	

#### MagicInfo Videowall S

File Formats Compatible with	
MagicInfo Videowall S Player	214
Read before using MagicInfo Videowall S Player	214
MagicInfo Videowall S	217
Settings	217
When Content is Running	218

#### Troubleshooting Guide

Requirements Before Contacting Samsung	
Customer Service Centre	219
Testing the Product	219
Checking the Resolution and Frequency	219
Check the followings.	220
Q & A	227

#### Specifications

General	229
PowerSaver	232
Preset Timing Modes	233

#### Appendix

Contact SAMSUNG WORLD WIDE	23
Responsibility for the Pay Service	
(Cost to Customers)	24
Not a product defect	24
A Product damage caused by customer's fault	24
Others	24
WEEE	24
Correct Disposal of This Product (Waste Electric	al &
Electronic Equipment)	24
Correct disposal of batteries in this product	24.
Optimum Picture Quality and Afterimage Bu	ırn-
in Prevention	24
Optimum Picture Quality	24
Prevention of Afterimage Burn-in	24
Licence	24
Terminology	25

# Chapter 01 Before Using the Product

#### **Copyright**

The contents of this manual are subject to change without notice to improve quality.

© 2013 Samsung Electronics

Samsung Electronics owns the copyright for this manual.

Use or reproduction of this manual in parts or entirety without the authorization of Samsung Electronics is prohibited.

Microsoft, Windows are registered trademarks of Microsoft Corporation.

VESA, DPM and DDC are registered trademarks of the Video Electronics Standards Association.

Ownership of all other trademarks is attributed to their due owner.

- An administration fee may be charged if either
  - (a) an engineer is called out at your request and there is no defect in the product (i.e. where you have failed to read this user manual).
  - (b) you bring the unit to a repair centre and there is no defect in the product (i.e. where you have failed to read this user manual).
- The amount of such administration charge will be advised to you before any work or home visit is carried out.

#### **Safety Precautions**

#### **Caution**

RISK OF ELECTRIC SHOCK DO NOT OPEN

Caution: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. (OR BACK)

THERE ARE NO USER SERVICEABLE PARTS INSIDE.

REFER ALL SERVICING TO OUALIFIED PERSONNEL.



This symbol indicates that high voltage is present inside.

It is dangerous to make any kind of contact with any internal part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

#### **Symbols**

#### Warning

A serious or fatal injury may result if instructions are not followed.

#### **Caution**

Personal injury or damage to properties may result if instructions are not followed.



Activities marked by this symbol are prohibited.



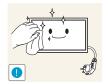
Instructions marked by this symbol must be followed.

#### Cleaning

- Exercise care when cleaning as the panel and exterior of advanced LCDs are easily scratched.
- Take the following steps when cleaning.
- The following images are for reference only. Real-life situations may differ from what is shown in the images.



- 1 Power off the product and computer.
- 2 Disconnect the power cord from the product.
- Hold the power cable by the plug and do not touch the cable with wet hands. Otherwise, an electric shock may result.



**3** Wipe the product with a clean, soft and dry cloth.



• Do not use detergents that contain alcohol, solvent or surface-active agents.



• Do not spray water or detergent directly on the product.



4 Wet a soft and dry cloth in water and wring thoroughly to clean the exterior of the product.



- 5 Connect the power cord to the product when cleaning is finished.
- 6 Power on the product and computer.

#### Storage

Due to the characteristics of high-glossy products, using a UV humidifier nearby may create whitecoloured stains on the product.

— Contact Customer Service Centre if the inside of the product needs cleaning (service fee will be charged).

#### **Electricity and Safety**

The following images are for reference only. Real-life situations may differ from what is shown in the images.

#### Warning



Do not use a damaged power cord or plug, or a loose power socket.

• An electric shock or fire may result.



Do not use multiple products with a single power socket.

• Overheated power sockets may cause a fire.



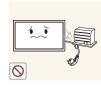
Do not touch the power plug with wet hands. Otherwise, an electric shock may result.



Insert the power plug all the way in so it is not loose.

• An unsecure connection may cause a fire.









Connect the power plug to a grounded power socket (type 1 insulated devices only).

• An electric shock or injury may result.

Do not bend or pull the power cord with force. Be careful not to leave the power cord under a heavy object.

• Damage to the cord may result in a fire or electric shock.

Do not place the power cord or product near heat sources.

• A fire or electric shock may result.

Clean any dust around the pins of the power plug or the power socket with a dry cloth.

• A fire may result.

#### **Caution**



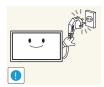
Do not disconnect the power cord while the product is being used.

• The product may become damaged by an electric shock.



Only use the power cord provided with your product by Samsung. Do not use the power cord with other products.

• A fire or electric shock may result.



Keep the power socket where the power cord is connected unobstructed.

- The power cord must be disconnected to cut off power to the product when an issue occurs.
- Note that the product is not completely powered down by using only the power button on the remote.

Hold the plug when disconnecting the power cord from the power socket.

• An electric shock or fire may result.

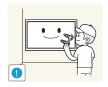
# Installation





DO NOT PLACE CANDLES, INSECT REPELLANTS OR CIGARETTES ON TOP OF THE PRODUCT. DO NOT INSTALL THE PRODUCT NEAR HEAT SOURCES.

• A fire may result.



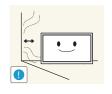
Have a technician install the wall-mount hanger.

- Installation by an unqualified person can result in an injury.
- Only use approved cabinets.



Do not install the product in poorly ventilated spaces such as a bookcase or closet.

• An increased internal temperature may cause a fire.



Install the product at least 10cm away from the wall to allow ventilation.

• An increased internal temperature may cause a fire.

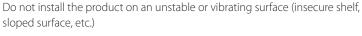


Keep the plastic packaging out of the reach of children.

• Children may suffocate.







- The product may fall and become damaged and/or cause an injury.
- Using the product in an area with excess vibration may damage the product or cause a fire.

Do not install the product in a vehicle or a place exposed to dust, moisture (water drips, etc.), oil, or smoke.

• A fire or electric shock may result.



Do not expose the product to direct sunlight, heat, or a hot object such as a stove.

• The product lifespan may be reduced or a fire may result.



Do not install the product within the reach of young children.

- The product may fall and injure children.
- As the front is heavy, install the product on a flat and stable surface.



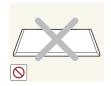
Edible oil, such as soybean oil, can damage or deform the product. Do not install the product in a kitchen or near a kitchen counter.

#### **Caution**



Do not drop the product while moving.

• Product failure or personal injury may result.



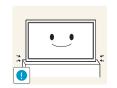
Do not set down the product on its front.

The screen may become damaged.



When installing the product on a cabinet or shelf, make sure that the bottom edge of the front of the product is not protruding.

- The product may fall and become damaged and/or cause an injury.
- Install the product only on cabinets or shelves of the right size.



Set down the product gently.

• Product failure or personal injury may result.



Installing the product in an unusual place (a place exposed to a lot of fine particles, chemical substances or extreme temperatures, or an airport or train station where the product should operate continuously for an extended period of time) may seriously affect its performance.

• Be sure to consult Samsung Customer Service Centre if you want to install the product at such a place.

#### Operation

#### Warning



There is a high voltage inside the product. Never disassemble, repair or modify the product yourself.

- A fire or electric shock may result.
- Contact Samsung Customer Service Centre for repairs.



Before moving the product, turn off the power switch and disconnect the power cable and all other connected cables.

• Damage to the cord may result in a fire or electric shock.



If the product generates abnormal sounds, a burning smell or smoke, disconnect the power cord immediately and contact Samsung Customer Service Centre.

• An electric shock or fire may result.



Do not let children hang from the product or climb on top of it.

• Children may become injured or seriously harmed.



If the product is dropped or the outer case is damaged, turn off the power switch and disconnect the power cord. Then contact Samsung Customer Service Centre.

Continued use can result in a fire or electric shock



Do not leave heavy objects or items that children like (toys, sweets, etc.) on top of the product.

• The product or heavy objects may fall as children try to reach for the toys or sweets resulting in a serious injury.



During a lightning or thunderstorm, power off the product and remove the power cable.

• A fire or electric shock may result.



Do not drop objects on the product or apply impact.

• A fire or electric shock may result.



Do not move the product by pulling the power cord or any cable.

 Product failure, an electric shock or fire may result from a damaged cable.



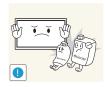
If a gas leakage is found, do not touch the product or power plug. Also, ventilate the area immediately.

• Sparks can cause an explosion or fire.



Do not lift or move the product by pulling the power cord or any cable.

 Product failure, an electric shock or fire may result from a damaged cable.



Do not use or keep combustible spray or an inflammable substance near the product.

• An explosion or fire may result.



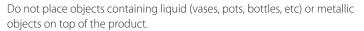
Ensure the vents are not blocked by tablecloths or curtains.

• An increased internal temperature may cause a fire.



Do not insert metallic objects (chopsticks, coins, hairpins, etc) or objects that burn easily (paper, matches, etc) into the product (via the vent or input/ output ports, etc).

- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Centre.
- Product failure, an electric shock or fire may result.

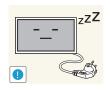


- Be sure to power off the product and disconnect the power cord when water or other foreign substances have entered the product. Then contact Samsung Customer Service Centre.
- Product failure, an electric shock or fire may result.

#### **Caution**

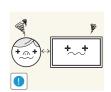














Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.

• Activate power-saving mode or a moving-picture screen saver if you will not be using the product for an extended period of time.

Disconnect the power cord from the power socket if you do not plan on using the product for an extended period of time (vacation, etc).

• Dust accumulation combined with heat can cause a fire, electric shock or electric leakage.

Use the product at the recommended resolution and frequency.

• Your eyesight may deteriorate.

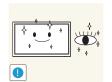
Do not hold the product upside-down or move it by holding the stand.

• The product may fall and become damaged or cause an injury.

Looking at the screen too close for an extended period of time can deteriorate your eyesight.

Do not use humidifiers or stoves around the product.

• A fire or electric shock may result.



Rest your eyes for more than 5 minutes for every 1 hour of product use.

• Eye fatigue will be relieved.



Do not touch the screen when the product has been turned on for an extended period of time as it will become hot.



Use only the specified standardized batteries, and do not use a new battery and a used battery at the same time.

• Otherwise, the batteries may be damaged or cause fire, personal injury or damage due to a leakage of the internal liquid.



Exercise caution when adjusting the product angle or stand height.

• Your hand or finger may get stuck and injured.

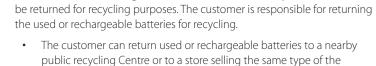
Store small accessories out of the reach of children.

• Tilting the product at an excessive angle may cause the product to fall and an injury may result.



Do not place heavy objects on the product.

• Product failure or personal injury may result.



battery or rechargeable battery.

The batteries (and rechargeable batteries) are not ordinary refuse and must

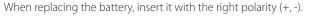
When using headphones or earphones, do not turn the volume too high.

• Having the sound too loud may damage your hearing.





• If children have had the battery in their mouths, consult your doctor immediately.



• Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.

# **Chapter 02 Preparations**

#### **Checking the Contents**

# Removing the Packaging (for MD32C MD40C and MD46C models only)

The following images are for reference only. Real-life situations may differ from what is shown in the images.

1 Remove the black locking device at the bottom of the box.



2 Remove the styrofoam from the product.



3 Check the product and remove the styrofoam and plastic bag.

The appearance of the actual product may differ from the image shown.



This image is for reference only.

4 Store the box in a dry area so that it can be used when moving the product in the future.

#### Removing the Packaging (for MD55C models only)

- The following images are for reference only. Real-life situations may differ from what is shown in the images.
- 1 Remove the black locking device at the bottom of the box.

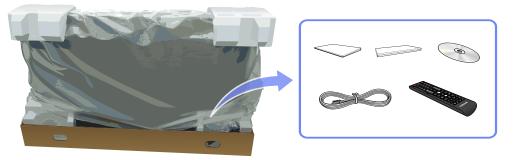


2 Using the grooves in the box, lift and remove the top of the box.





- 3 Check the components and remove the styrofoam and plastic bag.
  - The appearance of actual components may differ from the image shown.



4 Store the box in a dry area so that it can be used when moving the product in the future.

#### **Checking the Components**

#### **Components**

— Components may differ in different locations.



A stand is not provided with the product.
 To install a stand, you can purchase one separately.

 The appearance of the components and items sold separately may differ from the

 Contact the vendor where you purchased the product if any

components are missing.

image shown.

Quick setup guide



Warranty card
(Not available in some locations)



User manual



MagicInfo Lite Edition Software



Batteries (P.24)
(Not available in some locations)



Remote Control (P.23) (AA59-00714A)



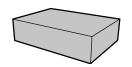
Power cord



D-SUB cable (P.44)

#### Items sold separately

 The following items can be purchased at your nearest retailer.



Wall-mount Kit



Stand



RS232C-Stereo cable (P.56)



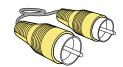
DVI cable (P.44)



HDMI-DVI cable (P.45)



HDMI cable (P.45)



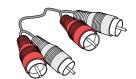
Video cable (P.48)



Component cable (P.48)



RCA stereo cable (P.50)



RCA cable (P.48)

- The RS232C adapter can be used to connect to another monitor using the D-SUB (9-pin) type RS232C cable.
- Ensure you connect each of the adapters to the correct RS232C IN or OUT port on the product.



AV/Component adapter (P.48)



Stereo cable



RS232C(IN) adapter



RS232C(OUT) adapter



LAN cable



Network Box

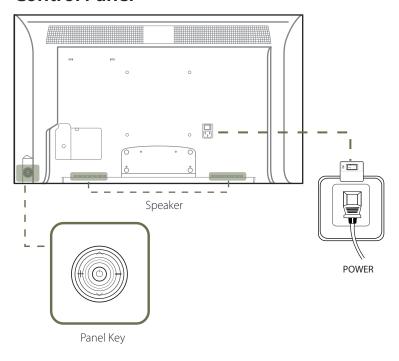


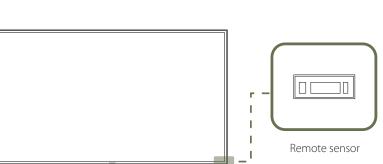
DP-DVI cable

(Used to connect a network box)

#### **Parts**

#### **Control Panel**





The colour and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

#### **Panel Key**

Buttons	Description
	Power on the product.
	If you press the ${\color{red} oldsymbol{\odot}}$ button when the product is turned on, the control menu will be displayed.
	To exit the OSD menu, press and hold the panel key for at least one second.
	Move to the upper or lower menu. You can also adjust the value of an option.
	Move to the left or right menu.
	You can adjust the volume by moving the panel key left or right when the control menu is not displayed.
	Receives signals from the remote.
Remote sensor	Using other display devices in the same space as the remote control of this product can cause the other display devices to be inadvertently controlled.

If you press the 
button on the panel key (P.19) when the product is turned on, the control menu will be displayed.

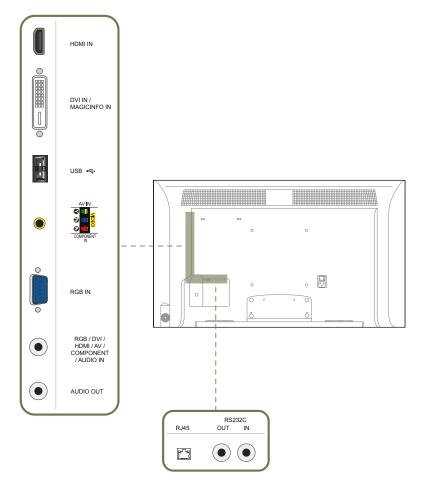
#### **Control** menu



Buttons		Description
		Select the connected input source.
	Source	Move the panel key right to select <b>Source</b> in the control menu. When the list of input sources is displayed, move the panel key up or down to select the desired input source. Next, press the panel key.
		Display the OSD menu.
Ш	MENU	Move the panel key left to select menu in the control menu. The OSD control screen will appear. Move the panel key right to select the desired menu. You can select a sub-menu item by moving the panel key up, down, left, or right. To change settings, select the desired menu and press the panel key.
		Enter <b>Contents Home</b> mode.
CONTENT	Contents Home	Move the panel key up to select ${f Contents\ Home}$ in the control menu.
		Power off the product.
Power of	Power off	Move the panel key down to select ${\bf Power\ off}$ ${\color{orange} oldsymbol{\odot}}$ in the control menu. Next, press the panel key.
<b>つ</b>	Return	Exit the control menu.

#### Reverse Side

The colour and shape of parts may differ from what is shown. Specifications are subject to change without notice to improve quality.

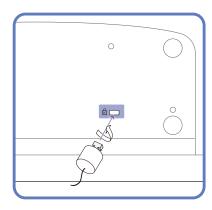


Port	Description
RS232C IN	Connects to MDC using an RS232C-stereo adapter.
RS232C OUT	
AUDIO OUT	Connects to the audio of a source device.
RGB / DVI / HDMI / AV / COMPONENT / AUDIO IN	Receives sound from a PC via an audio cable.
USB • C	Connect to a USB memory device.
HDMIIN	Connects to a source device using an HDMI cable.
DVI IN / MAGICINFO IN	DVI IN: Connects to a source device using a DVI cable or HDMI-DVI cable.  MAGICINFO IN: To use MagicInfo, make sure to connect the DP-DVI cable.
RGB IN	Connects to a source device using a D-SUB cable.
AV IN / COMPONENT IN	Connects to a source device using the AV/Component adapter.
RJ45	Connects to MDC using a LAN cable.

#### **Anti-theft Lock**

- An anti-theft lock allows you to use the product securely even in public places.
- The locking device shape and locking method depend on the manufacturer. Refer to the user guide provided with your anti-theft locking device for details.
- Stand: Sold separately

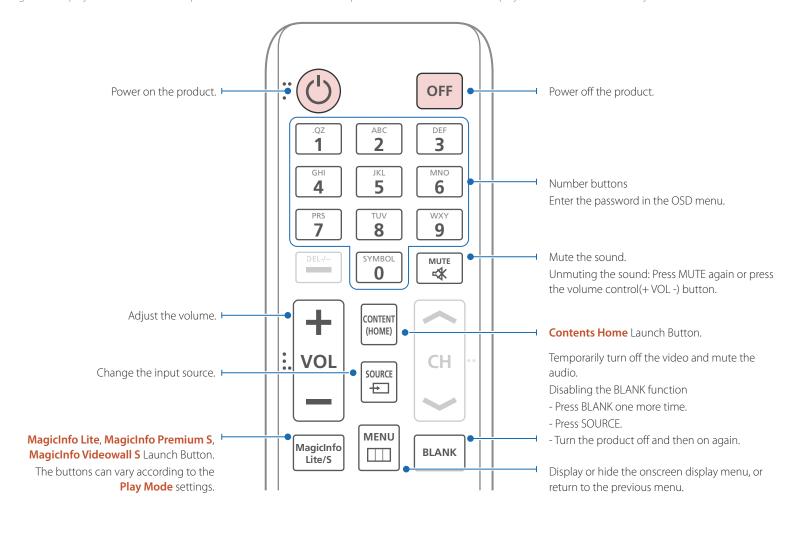
#### To lock an anti-theft locking device:

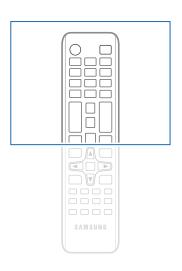


- 1 Fix the cable of your anti-theft locking device to a heavy object such as a desk.
- Put one end of the cable through the loop on the other end.
- Insert the locking device into the anti-theft lock slot at the back of the product.
- 4 Lock the locking device.
  - An anti-theft locking device can be purchased separately.
  - Refer to the user guide provided with your anti-theft locking device for details.
  - Anti-theft locking devices can be purchased at electronics retailers or online.

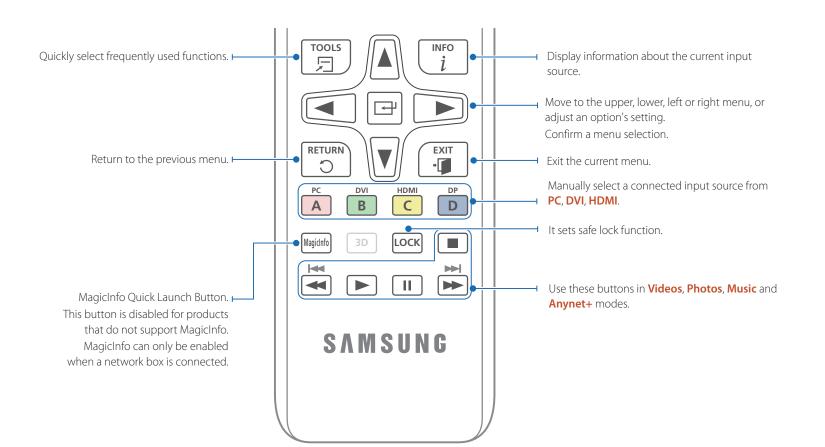
#### **Remote Control**

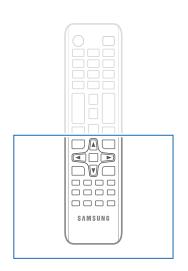
Using other display devices in the same space as the remote control of this product can cause the other display devices to be inadvertently controlled.





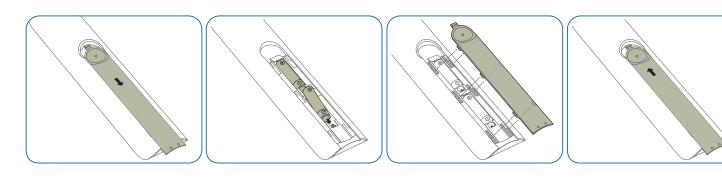
 Remote control button functions may differ for different products.





 Remote control button functions may differ for different products.

#### To place batteries in the remote control



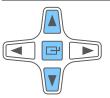
#### Adjusting the OSD with the Remote Control

#### **Buttons**

#### Description



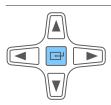
1 Open the OSD menu.



2 Select from Picture, Sound, Network, System or Support in the displayed OSD menu screen.



**3** Change settings as desired.

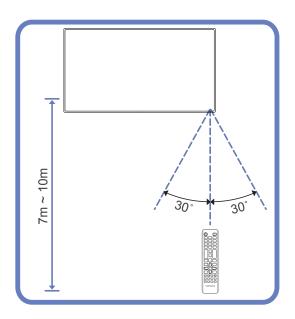


4 Finish setting.



5 Close the onscreen display (OSD) menu.

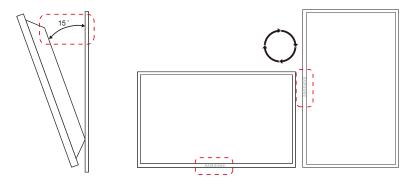
#### **Remote Control Reception Range**



Use the remote control within 7m to 10m from the sensor on the product at an angle of 30° from the left and right.

- Store used batteries out of reach of children and recycle.
- Do not use a new and used battery together. Replace both batteries at the same time.
- Remove batteries when the remote control is not to be used for an extended period of time.

# Before Installing the Product (Installation Guide)



To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

- Ensure that an authorized installation company installs the wall mount.
- Otherwise, it may fall and cause personal injury.
- Make sure to install the specified wall mount.

#### **Tilting Angle and Rotation**

— Contact Samsung Customer Service Centre for further details.

- The product can be tilted at a maximum angle of 15° from a perpendicular wall surface.
- To use the product vertically (portrait), turn it clockwise so that the LED is pointing down.

# **A**

Figure 1.1 Side view

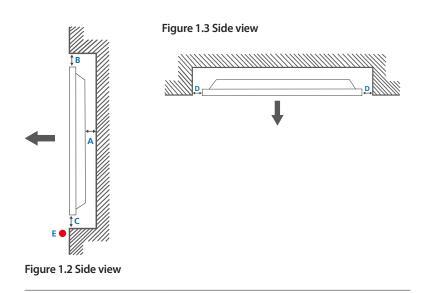
#### **Ventilation**

#### Installation on a Perpendicular Wall

A Minimum 40 mm

B Ambient temperature: Under 35°C

• When installing the product on a perpendicular wall, allow at least 40 mm of space between the product and wall surface for ventilation and ensure that the ambient A temperature is kept below 35°C.



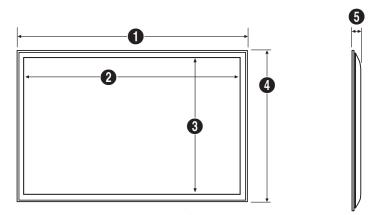
#### **Installation on an Indented Wall**

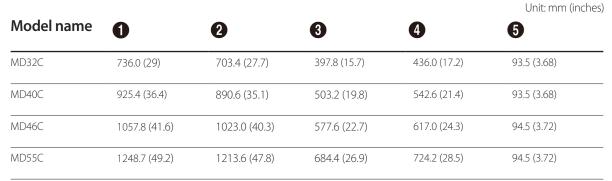
— Contact Samsung Customer Service Centre for further details.

#### Plane view

- A Minimum 40 mm
- B Minimum 70 mm
- C Minimum 50 mm
- D Minimum 50 mm
- E Ambient temperature: Under 35°C

#### **Dimensions**





All drawings are not necessarily to scale. Some dimensions are subject to change without prior notice.

Refer to the dimensions prior to performing installation of your product. Not responsible for typographical or printed errors.

When installing the product on an indented wall, allow at least the space specified above between the product and wall for ventilation and ensure that the ambient temperature is kept below 35°C.

#### **Installing the Wall Mount**

#### **Installing the Wall Mount Kit**

The wall mount kit (sold separately) allows you to mount the product on the wall.

For detailed information on installing the wall mount, see the instructions provided with the wall mount.

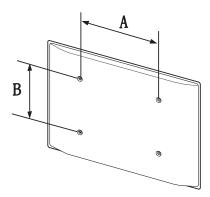
We recommend you contact a technician for assistance when installing the wall mount bracket.

Samsung Electronics is not responsible for any damage to the product or injury to yourself or others if you elect to install the wall mount on your own.

#### **Wall Mount Kit Specifications (VESA)**

Install your wall mount on a solid wall perpendicular to the floor. Before attaching the wall mount to surfaces other than plaster board, please contact your nearest dealer for additional information.

If you install the product on a slanted wall, it may fall and result in severe personal injury.



- Samsung wall mount kits contain a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws that are longer than the standard length or do not comply with the VESA standard screw specifications. Screws that are too long may cause damage to the inside of the product.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on the wall mount specifications.
- Do not fasten the screws too firmly. This may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not mount the product at more than a 15 degree tilt.
- Always have two people mount the product on a wall.
- Standard dimensions for wall mount kits are shown in the table below.

Unit: mm (inches)

Model name	VESA screw hole specs (A * B) in millimeters	Standard Screw	Quantity
MD32C	200 × 200 / 7.9 × 7.9	M6	
MD40C			4
MD46C	400 × 400 / 15.7 × 15.7	M8	_ `
MD55C			

Do not install your Wall Mount Kit while your product is turned on. It may result in personal injury due to electric shock.

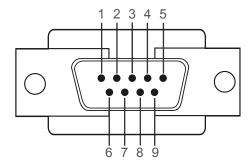
## Remote Control (RS232C)

#### **Cable Connection**

#### **RS232C Cable**

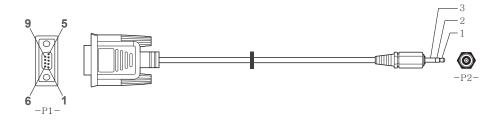
Interface	RS232C (9 pins)
Pin	TxD (No.2), RxD (No.3), GND (No.5)
Bit rate	9600 bps
Data bits	8 bit
Parity	None
Stop bit	1 bit
Flow control	None
Maximum length	15 m (only shielded type)
-	

#### • Pin assignment



Pin	Signal
1	Detect data carrier
2	Received data
3	Transmitted data
4	Prepare data terminal
5	Signal ground
6	Prepare data set
7	Send request
8	Clear to send
9	Ring indicator

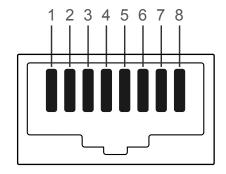
• RS232C cable Connector: 9-Pin D-Sub to Stereo Cable



-P1-		-P1-		-P2-		-P2-	
Female	Rx	2	>	3	Tx	STEREO	
	Tx	3	<	2	Rx	PLUG	
	Gnd	5		5	Gnd	(3.5ø)	

#### **LAN Cable**

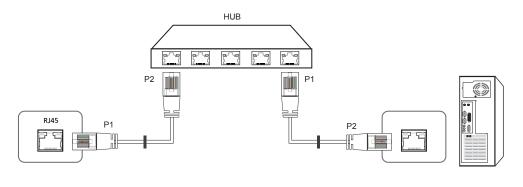
• Pin assignment



Pin No	Standard Colour	Signal	
1	White and orange	TX+	
2	Orange	TX-	
3	White and green	RX+	
4	Blue	NC	
5	White and blue	NC	
6	Green	RX-	
7	White and brown	NC	
8	Brown	NC	

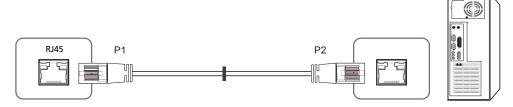
#### • Connector: RJ45

#### Direct LAN cable (PC to HUB)



Signal	P1		P2	Signal
TX+	1	<>	1	TX+
TX-	2	<>	2	TX-
RX+	3	<>	3	RX+
RX-	6	<>	6	RX-

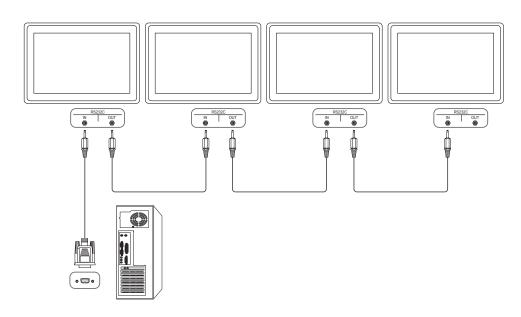
#### Cross LAN cable (PC to PC)



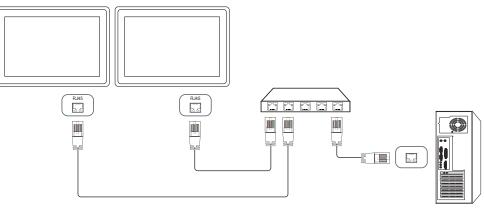
Signal	P1		P2	Signal
TX+	1	<>	3	RX+
TX-	2	<>	6	RX-
RX+	3	<>	1	TX+
RX-	6	<>	2	TX-

#### Connection

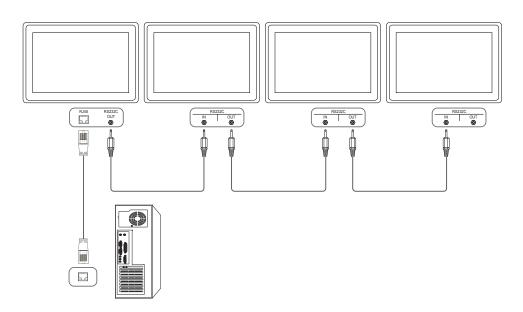
Connection 1



• Connection 2



• Connection 3



#### **Control Codes**

#### Viewing control state (Get control command)

Header	Command	ID	Data length	Checksum
0xAA	Command type	-	0	-

#### **Controlling (Set control command)**

Header	Command	ID	Data length	Data	Checksum
0xAA	Command type	-	1	Value	-

#### Command

No.	Command type	Command	Value range
1	Power control	0x11	0~1
2	Volume control	0x12	0~100
3	Input source control	0x14	-
4	Screen mode control	0x18	-
5	Screen size control	0x19	0~255
6	PIP on/off control	0x3C	0~1
7	Auto adjustment control (PC and BNC only)	0x3D	0
8	Video wall mode control	0x5C	0~1
9	Safety Lock	0x5D	0~1

No.	Command type	Command	Value range	
10	Video Wall On	0x84	0~1	
11	Video Wall User Control	0x89	-	_

• All communications take place in hexadecimals. The checksum is calculated by adding up all values except the header. If a checksum adds up to be more than 2 digits as shown below (11+FF+01+01=112), the first digit is removed.

#### E.g. Power On & ID=0

Header	Command	ID	Data length	Data 1	Checksum
0xAA	0x11		1	"Power"	_
Header	Command	ID	Data length	Data 1	12
0xAA	0x11	_	1	1	

• To control all devices connected by a serial cable simultaneously irrespective of IDs, set the ID as "0xFE" and transmit commands. Commands will be executed by each device but ACK will not respond.

#### **Power control**

- Function
  A product can be powered on and off using a PC.
- Viewing power state (Get Power ON / OFF Status)

Header	Command	ID	Data length	Checksum
0xAA	0x11	_	0	_

• Setting power ON/Off (Set Power ON / OFF)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x11	_	1	"Power"	-

"Power": Power code to be set on a product.

1: Power ON

0: Power OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x11	"Power"	-

"Power": Power code to be set on a product.

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x11	"ERR"	_

<sup>&</sup>quot;ERR": A code showing what error has occurred.

#### **Volume control**

• Function
The volume of a product can be adjusted using a PC.

• Viewing volume state (Get Volume Status)

Header	Command	ID	Data length	Checksum	
0xAA	0x12		0		
• Setting	the volume (Set V	olume)			
Header	Command	ID	Data length	Data	Checksum
0xAA	0x12	_	1	"Volume"	

"Volume": Volume value code to be set on a product. (0-100)

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x12	"Volume"	

"Volume": Volume value code to be set on a product. (0-100)

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x12	"ERR"	_

 $<sup>\</sup>hbox{\tt "ERR"}: A \ code \ showing \ what \ error \ has \ occurred.$ 

#### Input source control

Function
 The input source of a product can be changed using a PC.

• Viewing input source state (Get Input Source Status)

Header	Command	ID	Data length	Checksum	
0xAA	0x14	_	0		
Setting	the input source (	Set Input	: Source)		

Header Command ID Data length Data Checksum

OxAA 0x14 1 "Input Source"

"Input Source": An input source code to be set on a product.

	·
0x14	PC
0x18	DVI
0x0C	Input source
0x08	Component
0x20	MagicInfo
0x1F	DVI_video
0x30	RF(TV)
0x40	DTV
0x21	HDMI
0x22	HDMI_PC

 $<sup>\</sup>overline{\phantom{m}}$  DVI\_video, HDMI\_PC cannot be used with the Set command. They only respond to "Get" commands.

— MagicInfo is only available with models that contain the MagicInfo function.

RF(TV), DTV are only available with models that include a TV.

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	-	3	'A'	0x14	"Input Source"	

"Input Source": An input source code to be set on a product.

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x14	"ERR"	

<sup>&</sup>quot;ERR": A code showing what error has occurred.

This model does not support HDMI, HDMI\_PC ports.

# Screen mode control

Function

The screen mode of a product can be changed using a PC.

Screen mode cannot be controlled when the Video Wall function is enabled.

This control can only be used on models that include a TV.

• Viewing screen status (Get Screen Mode Status)

• Viewi	ng screen status (	(Get 5	creen	viode Sta	tus)				
Header	Command		ID	Data le	ngth	Che	ecksum		
0xAA	0x18			0					
• Settin	g the picture size	e (Set	Picture	Size)					
Header	Command		ID	Data length	ļ	Data		Checksum	
0xAA	0x18			1		'Scree	n Mode"	-	
Screen Mc	ode": A code that	sets th	ne proc	luct statu	S				
0x01	16:9						_		
0x04	Zoom						_		
0x31	Wide Zoom						_		
0x0B	4:3						_		
• Ack							_		
Header	Command	ID	Data	length	Ack/Na	ık	r-CMD	Val1	Checksum
0xAA	0xFF		3		'A'		0x18	"Screen Mode"	_

<sup>&</sup>quot;Screen Mode": A code that sets the product status

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	-	3	'N'	0x18	"ERR"	-

<sup>&</sup>quot;ERR": A code showing what error has occurred

## Screen size control

Function
 The screen size of a product can be changed using a PC.

• Viewing the screen size (Get Screen Size Status)

VIEWI	rig the screen si	ze (Get	30166113126	e Status)			
Header	Command		ID Da	ata length	Checksı	um	
0xAA	0x19		0				
• Ack							
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x19	"Screen Size"	_
"Screen Size	e": product scre	en size (	(range: 0 –	255, unit: inch)			
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x19	"ERR"	_

<sup>&</sup>quot;ERR": A code showing what error has occurred

# PIP On/Off control

- Function
  - The PIP mode of a product can be turned on or off using a PC.
  - Only available on models that have the PIP function.
  - The mode cannot be controlled if **Video Wall** is set to **On**.
  - This function is not available in **MagicInfo**.
- Viewing PIP on/off state (Get the PIP ON / OFF Status)

Header	Command	ID	Data length	Checksum
0xAA	0x3C		0	

• Setting PIP on/off (Set the PIP ON / OFF)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x3C	-	1	"PIP"	-

"PIP": A code used to turn the PIP mode of a product on or off

1: PIP ON

0: PIP OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x3C	"PIP"	

"PIP": A code used to turn the PIP mode of a product on or off

• Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x3C	"PIP"	

<sup>&</sup>quot;ERR": A code showing what error has occurred

# Auto adjustment control (PC and BNC only)

- Function
  Automatically adjust the PC system screen using a PC.
- Viewing auto adjustment state (Get Auto Adjustment Status)
   None
- Setting auto adjustment (Set Auto Adjustment)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x3D	<del>_</del>	1	"Auto Adjustment"	_

"Auto Adjustment" : 0x00 (at all times)

Ack

ACK							
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x3D	"Auto Adjustment"	_
• Nak							
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x3D	"ERR"	_

<sup>&</sup>quot;ERR": A code showing what error has occurred

## **Video Wall Mode Control**

Function

**Video Wall** mode can be activated on a product using a PC.

This control is only available on a product whose **Video Wall** is enabled.

• Viewing video wall mode (Get Video Wall Mode)

Header	Command	ID	Data length	Checksum
0xAA	0x5C		0	

• Setting the video wall (Set Video Wall Mode)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5C		1	"Video Wall Mode"	_

"Video Wall Mode": A code used to activate Video Wall mode on a product

#### 1: Full

#### 0: Natural

Ack

				_	_		
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF		3	'A'	0x5C	"Video Wall Mode"	

"Video Wall Mode": A code used to activate Video Wall mode on a product

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x5C	"ERR"	

<sup>&</sup>quot;ERR": A code showing what error has occurred

# **Safety Lock**

• Function

PC can be used to turn the **Safety Lock** function on or off on a product.

This control is available regardless of whether or not the power is turned on.

• Viewing the safety lock state (Get Safety Lock Status)

Header	Command	ID	Data length	Checksum
0xAA	0x5D	-	0	-

• Enabling or disabling safety lock (Set Safety Lock Enable / Disable)

Header	Command	ID	Data length	Data	Checksum
0xAA	0x5D		1	"Safety Lock"	_

"Safety Lock": Safety lock code to be set on a product

1: ON

0: OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	-	3	'A'	0x5D	"Safety Lock"	_

"Safety Lock": Safety lock code to be set on a product

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x5D	"ERR"	

<sup>&</sup>quot;ERR": A code showing what error has occurred

# Video Wall On

- Function
  Turn Video Wall on or off on the product from your computer.
- Get Video Wall On/Off Status

Header	Command	ID	Data length	Checksum	-
0xAA	0x84		0	_	
Set Vide	eo Wall On/Off				-
Header	Command	ID	Data length	Data	Checksum
0xAA	0x84	_	1	V.Wall_On	-

• V.Wall\_On: Video Wall code to be assigned to the product

1: Video Wall ON

0: Video Wall OFF

Ack

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'A'	0x84	V.Wall_ On	_

V.Wall\_On : Same as above

Nak

Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum
0xAA	0xFF	_	3	'N'	0x84	ERR	

"ERR": A code showing what error has occurred

## **Video Wall User Control**

- Function
   Turn the Video Wall function on or off on the product from your computer.
- Get Video Wall Status

Header	Command	ID	Data length	Checksu	m	
0xAA	0x89		0			
Set Vid	eo Wall					
Header	Command	ID	Data length	Val1	Val2	Checksum
0xAA	0x89		2	Wall_Div	Wall_SNo	_

Wall\_Div: Video Wall Divider code assigned to the product

## 10x10 Video Wall Model

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00	0x00
0x11	0x12	0x13	0x14	0x15	0x16	0x17	0x18	0x19	0x1A	0x1B	0x1C	0x1D	0x1E	0x1F
0x21	0x22	0x23	0x24	0x25	0x26	0x27	0x28	0x29	0x2A	0x2B	0x2C	0x2D	0x2E	0x2F
0x31	0x32	0x33	0x34	0x35	0x36	0x37	0x38	0x39	0x3A	0x3B	0x3C	0x3D	0x3E	0x3F
0x41	0x42	0x43	0x44	0x45	0x46	0x47	0x48	0x49	0x4A	0x4B	0x4C	0x4D	0x4E	0x4F
0x51	0x52	0x53	0x54	0x55	0x56	0x57	0x58	0x59	0x5A	0x5B	0x5C	0x5D	0x5E	0x5F
0x61	0x62	0x63	0x64	0x65	0x66	0x67	0x68	0x69	0x6A	0x6B	0x6C	0x6D	0x6E	0x6F
0x71	0x72	0x73	0x74	0x75	0x76	0x77	0x78	0x79	0x7A	0x7B	0x7C	0x7D	0x7E	N/A
0x81	0x82	0x83	0x84	0x85	0x86	0x87	0x88	0x89	0x8A	0x8B	0x8C	N/A	N/A	N/A
0x91	0x92	0x93	0x94	0x95	0x96	0x97	0x98	0x99	0x9A	0x9B	N/A	N/A	N/A	N/A
0xA1	0xA2	0xA3	0xA4	0xA5	0xA6	0xA7	0xA8	0xA9	0xAA	N/A	N/A	N/A	N/A	N/A
0xB1	0xB2	0xB3	0xB4	0xB5	0xB6	0xB7	0xB8	0xB9	N/A	N/A	N/A	N/A	N/A	N/A
0xC1	0xC2	0xC3	0xC4	0xC5	0xC6	0xC7	0xC8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0xD1	0xD2	0xD3	0xD4	0xD5	0xD6	0xD7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0xE1	0xE2	0xE3	0xE4	0xE5	0xE6	0xE7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0xF1	0xF2	0xF3	0xF4	0xF5	0xF6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	0x00 0x11 0x21 0x31 0x41 0x51 0x61 0x71 0x81 0x91 0xA1 0xC1 0xC1	0x00         0x00           0x11         0x12           0x21         0x22           0x31         0x32           0x41         0x42           0x51         0x52           0x61         0x62           0x71         0x72           0x81         0x82           0x91         0x92           0xA1         0xA2           0xC1         0xC2           0xE1         0xE2	0x00         0x00         0x00           0x11         0x12         0x13           0x21         0x22         0x23           0x31         0x32         0x33           0x41         0x42         0x43           0x51         0x52         0x53           0x61         0x62         0x63           0x71         0x72         0x73           0x81         0x82         0x83           0x91         0x92         0x93           0xA1         0xA2         0xA3           0xC1         0xC2         0xC3           0xD1         0xD2         0xD3           0xE1         0xE2         0xE3	0x00         0x00         0x00         0x00           0x11         0x12         0x13         0x14           0x21         0x22         0x23         0x24           0x31         0x32         0x33         0x34           0x41         0x42         0x43         0x44           0x51         0x52         0x53         0x54           0x61         0x62         0x63         0x64           0x71         0x72         0x73         0x74           0x81         0x82         0x83         0x84           0x91         0x92         0x93         0x94           0xA1         0xA2         0xA3         0xA4           0xB1         0xB2         0xB3         0xB4           0xC1         0xC2         0xC3         0xC4           0xD1         0xD2         0xD3         0xD4           0xE1         0xE2         0xE3         0xE4	0x00         0x00         0x00         0x00         0x00         0x00           0x11         0x12         0x13         0x14         0x15           0x21         0x22         0x23         0x24         0x25           0x31         0x32         0x33         0x34         0x35           0x41         0x42         0x43         0x44         0x45           0x51         0x52         0x53         0x54         0x55           0x61         0x62         0x63         0x64         0x65           0x71         0x72         0x73         0x74         0x75           0x81         0x82         0x83         0x84         0x85           0x91         0x92         0x93         0x94         0x95           0xA1         0xA2         0xA3         0xA4         0xA5           0xB1         0xB2         0xB3         0xB4         0xB5           0xC1         0xC2         0xC3         0xC4         0xC5           0xD1         0xD2         0xD3         0xD4         0xD5           0xE1         0xE2         0xE3         0xE4         0xE5	0x00         0x00         0x00         0x00         0x00         0x00         0x00           0x11         0x12         0x13         0x14         0x15         0x16           0x21         0x22         0x23         0x24         0x25         0x26           0x31         0x32         0x33         0x34         0x35         0x36           0x41         0x42         0x43         0x44         0x45         0x46           0x51         0x52         0x53         0x54         0x55         0x56           0x61         0x62         0x63         0x64         0x65         0x66           0x71         0x72         0x73         0x74         0x75         0x76           0x81         0x82         0x83         0x84         0x85         0x86           0x91         0x92         0x93         0x94         0x95         0x96           0xA1         0xA2         0xA3         0xA4         0xA5         0xA6           0xB1         0xB2         0xB3         0xB4         0xB5         0xB6           0xC1         0xC2         0xC3         0xC4         0xC5         0xC6           0xD1         0xD2	0x00         0x00         0x00         0x00         0x00         0x00         0x00         0x00         0x00           0x11         0x12         0x13         0x14         0x15         0x16         0x17           0x21         0x22         0x23         0x24         0x25         0x26         0x27           0x31         0x32         0x33         0x34         0x35         0x36         0x37           0x41         0x42         0x43         0x44         0x45         0x46         0x47           0x51         0x52         0x53         0x54         0x55         0x56         0x57           0x61         0x62         0x63         0x64         0x65         0x66         0x67           0x71         0x72         0x73         0x74         0x75         0x76         0x77           0x81         0x82         0x83         0x84         0x85         0x86         0x87           0x91         0x92         0x93         0x94         0x95         0x96         0x97           0xA1         0xA2         0xA3         0xA4         0xA5         0xA6         0xA7           0xB1         0xB2         0xB3         0xB4	0x00         0x18           0x21         0x22         0x23         0x24         0x25         0x26         0x27         0x28           0x31         0x32         0x33         0x34         0x35         0x36         0x37         0x38           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58           0x61         0x62         0x63         0x64         0x65         0x66         0x67         0x68           0x71         0x72         0x73         0x74         0x75         0x76         0x77         0x78           0x81         0x92         0x93 <t< td=""><td>0x00         0x00         0x10         0x10         0x19         0x19         0x19         0x19         0x21         0x22         0x23         0x24         0x25         0x26         0x27         0x28         0x29           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59           0x61         0x62         0x63         0x64         0x65         0x66         0x67         0x68         0x69           0x71         0x72         0x73         0x74         0x75         0x76         0x77</td><td>0x00         0x00         0x1A         0x1A         0x1A         0x1A         0x1A         0x1A         0x1A         0x21         0x22         0x23         0x24         0x25         0x26         0x27         0x38         0x39         0x3A           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49         0x4A           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59         0x5A           0x61         0x62         0x63         0x64         0x65         0x66         0x67         0x68         0x69         0x5A           0x71         0x72</td><td>0x00         0x00         0x18         0x19         0x1A         0x1B           0x31         0x32         0x33         0x34         0x35         0x36         0x37         0x38         0x39         0x3A         0x3B           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49         0x4A         0x4B           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59         0x5A         0x5B           0x61         0x62         0x63         0x64         0x65         0x66</td><td>0x00         0x00         <th< td=""><td>0x00         0x00         <th< td=""><td>OXOO         OXOO         <th< td=""></th<></td></th<></td></th<></td></t<>	0x00         0x10         0x10         0x19         0x19         0x19         0x19         0x21         0x22         0x23         0x24         0x25         0x26         0x27         0x28         0x29           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59           0x61         0x62         0x63         0x64         0x65         0x66         0x67         0x68         0x69           0x71         0x72         0x73         0x74         0x75         0x76         0x77	0x00         0x1A         0x1A         0x1A         0x1A         0x1A         0x1A         0x1A         0x21         0x22         0x23         0x24         0x25         0x26         0x27         0x38         0x39         0x3A           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49         0x4A           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59         0x5A           0x61         0x62         0x63         0x64         0x65         0x66         0x67         0x68         0x69         0x5A           0x71         0x72	0x00         0x18         0x19         0x1A         0x1B           0x31         0x32         0x33         0x34         0x35         0x36         0x37         0x38         0x39         0x3A         0x3B           0x41         0x42         0x43         0x44         0x45         0x46         0x47         0x48         0x49         0x4A         0x4B           0x51         0x52         0x53         0x54         0x55         0x56         0x57         0x58         0x59         0x5A         0x5B           0x61         0x62         0x63         0x64         0x65         0x66	0x00         0x00 <th< td=""><td>0x00         0x00         <th< td=""><td>OXOO         OXOO         <th< td=""></th<></td></th<></td></th<>	0x00         0x00 <th< td=""><td>OXOO         OXOO         <th< td=""></th<></td></th<>	OXOO         OXOO <th< td=""></th<>

# 10x10 Video Wall Model : (1 ~ 100)

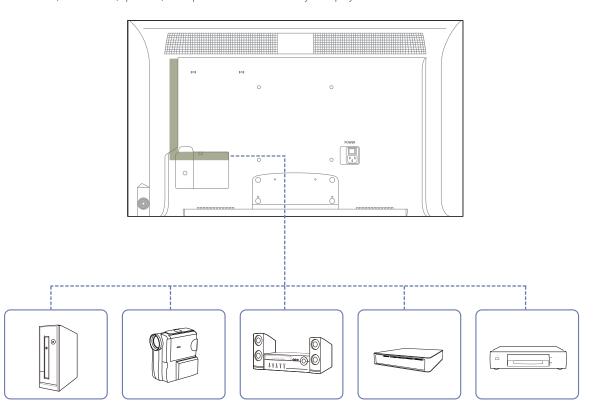
Set Number	er		Data					
1			0x01					
2			0x02					
99			0x63					
100			0x64					
• Ack								
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Val2	Checksum
0xAA	0xFF	_	4	'A'	0x89	Wall_Div	Wall_SNo	_
• Nak								
Header	Command	ID	Data length	Ack/Nak	r-CMD	Val1	Checksum	
0xAA	0xFF	_	3	'N'	0x89	ERR	_	

<sup>&</sup>quot;ERR": A code showing what error has occurred

# Chapter 03 Connecting and Using a Source Device

# **Before Connecting**

Check the following before you connect this product with other devices. Devices that can be connected to this product include PCs, camcorders, speakers, set top boxes and DVD/Blu-ray Disc players.



# **Pre-connection Checkpoints**

- Before connecting a source device, read the user manual provided with it.

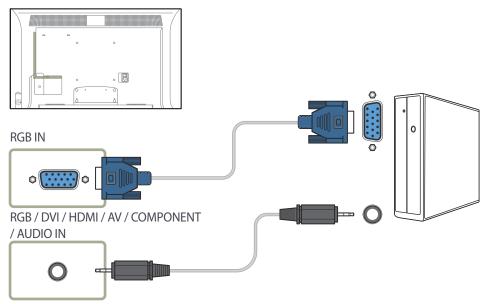
  The number and locations of ports on source devices may differ from device to device.
- Do not connect the power cable until all connections are completed.
   Connecting the power cable during connection may damage the product.
- Connect the sound ports correctly: left = white and right = red.
- Check the types of ports at the back of the product you want to connect.

# Connecting to a PC

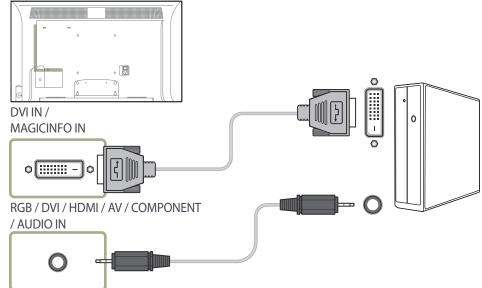
- Do not connect the power cable before connecting all other cables.

  Ensure you connect a source device first before connecting the power cable.
- A PC can be connected to the product in a variety of ways. Select a connection method suitable for your PC.

# Connection using the D-SUB cable (Analogue type)



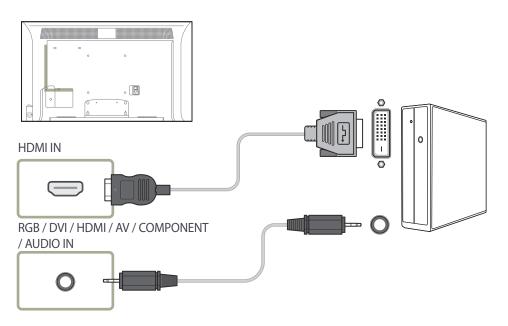
# Connection using a DVI cable (Digital type)



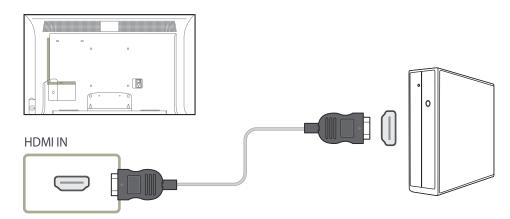
<sup>—</sup> Connecting parts may differ in different products.

# Connection Using an HDMI-DVI Cable

When you connect a PC to the product using an HDMI-DVI cable, set **Edit Name** to **DVI PC** to access video and audio content stored on the PC.



# **Connection Using an HDMI Cable**



# **Changing the Resolution**

- Adjust the resolution and refresh rate in Control Panel on your PC to obtain optimum picture quality.
- The picture quality of TFT-LCDs may degrade if the optimum resolution is not selected.

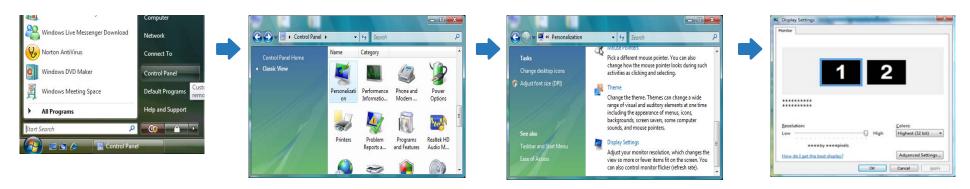
# **Changing the Resolution on Windows XP**

Go to **Control Panel**  $\rightarrow$  **Display**  $\rightarrow$  **Settings**, and change the resolution.



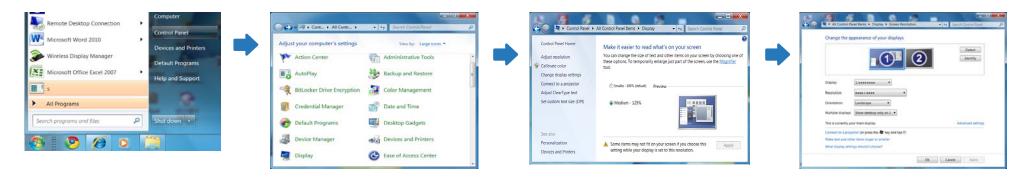
# **Changing the Resolution on Windows Vista**

Go to **Control Panel**  $\rightarrow$  **Personal Settings**  $\rightarrow$  **Display Settings**, and change the resolution.



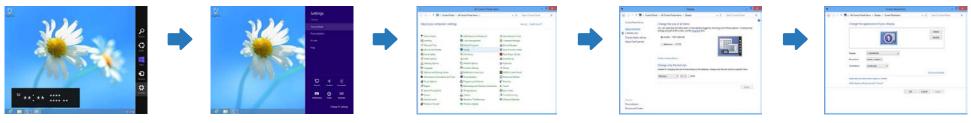
# **Changing the Resolution on Windows 7**

Go to **Control Panel**  $\rightarrow$  **Display**  $\rightarrow$  **Screen Resolution**, and change the resolution.



# **Changing the Resolution on Windows 8**

Go to **Settings**  $\rightarrow$  **Control Panel**  $\rightarrow$  **Display**  $\rightarrow$  **Screen Resolution**, and change the resolution.

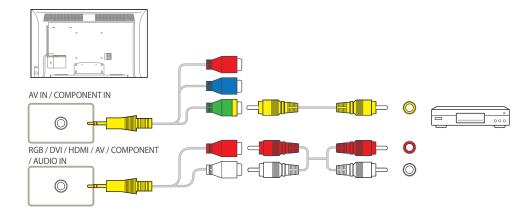


# **Connecting to a Video Device**

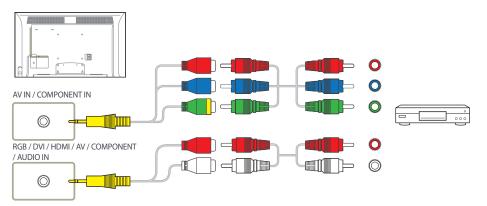
- Do not connect the power cable before connecting all other cables.

  Ensure you connect a source device first before connecting the power cable.
- You can connect a video device to the product using a cable.
  - Connecting parts may differ in different products.
  - Press the **SOURCE** button on the remote control to change the source.

# **Connection Using the AV Cable**

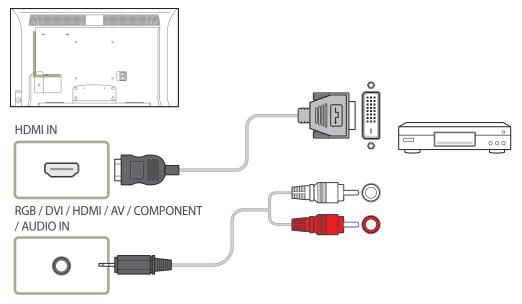


# **Connection Using the component Cable**



# **Connection Using an HDMI-DVI Cable**

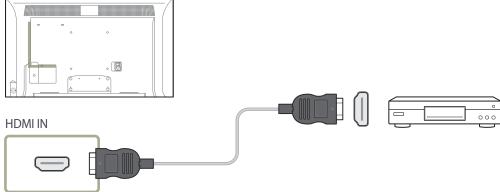
- Audio will not be enabled if the product is connected to a video device using an HDMI-DVI cable. To resolve this, additionally connect an audio cable to the audio ports on the product and video device. When you connect a video device to the product using an HDMI-DVI cable, set **Edit Name** to **DVI Devices** to access video and audio content stored on the video device.
- Supported resolutions include 1080p (50/60Hz), 720p (50/60Hz), 480p, and 576p.



# **Connection Using an HDMI Cable**

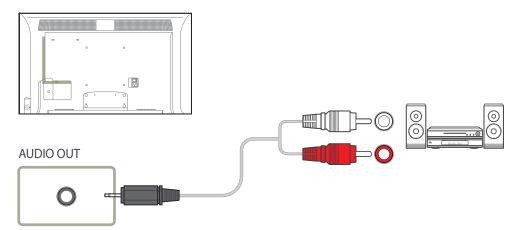
## Using an HDMI cable or HDMI to DVI Cable (up to 1080p)

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
  - To connect the product to a digital device that does not support HDMI output, use an HDMI-DVI and audio cables.
- The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the product. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
- Be sure to use an HDMI cable with a thickness of 14 mm or less.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- A basic high-speed HDMI cable or one with ethernet is recommended. This product does not support the ethernet function via HDMI.



# **Connecting to an Audio System**

— Connecting parts may differ in different products.



# Connecting the network box (Sold separately)

For details on how to connect to a network box, refer to the user's manual provided with the network box upon purchase.

# MagicInfo

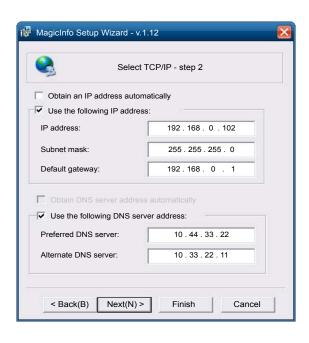
To use MagicInfo, a network box (sold separately) must be connected to the product.

- To change the MagicInfo settings, run "MagicinfoSetupWizard" on the desktop.
- For details on how to use **MagicInfo**, refer to the DVD provided with the network box.
- The information in this section is subject to change without notice for quality improvement.
- If a problem occurs after installing an operating system other than the one provided with the network box, restoring the previous version of the operating system, or installing software that is not compatible with the operating system provided, you will not be able to benefit from technical support and will be charged a fee for a visit from a service technician. A product exchange or refund will also not be available.

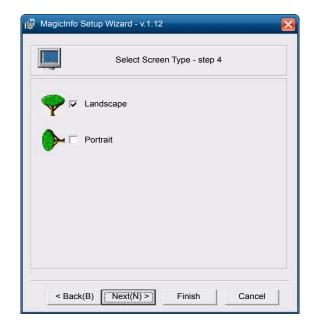


## **Entering MagicInfo mode**

- 1 After installing and connecting the network box (sold separately) to the product, power on the product.
- Press **SOURCE** on the remote control, and select **MagicInfo**.
- Connecting the network box to the **DVI IN / MAGICINFO IN** port on the product will change **Source** from **DVI** to **MagicInfo**.
- 3 Select the default application you want to run when MagicInfo starts.



4 Enter the IP information.



6 Select a display mode.



Select a language. (The default language is **English**.)



**7** Double-check the settings you have just configured.

If the execution icon does not appear, double-click the **MagicInfo** icon on the desktop. The icon will appear at the bottom right of the screen.

# **Changing the Input source**

## Source

 $\mathsf{MENU} \ \square\!\!\!\square \to \mathsf{Support} \to \mathsf{Contents} \ \mathsf{Home} \to \mathsf{Source} \to \mathsf{ENTER} \ \blacksquare\!\!\!\!\square$ 



<sup>-</sup> The displayed image may differ depending on the model.

**Source** allows you to select a variety of sources and change source device names.

You can display the screen of a source device connected to the product. Select a source from source list to display the screen of the selected source.

- The input source can also be changed by using the **SOURCE** button on the remote control.
- The screen may not display correctly if an incorrect source is selected for the source device you want to convert to.

# Chapter 04 Using MDC

# **Configuring Settings for Multi Control**

MENUⅢ→ System → Multi Control → ENTER 🚭

Assign an individual ID to your product.

# **Configuring settings for Multi Control**

ID Setup

Assign an ID to a set. (Range: 0~99)

Press ▲/▼ to select a number, and press 🗗.

ID Input

Enter the ID number of the product connected to the input cable for input signal reception.

Enter the number you want using the number buttons on the remote control.

MDC Connection

Select a method to connect to MDC to receive the MDC signal.

- RS232C MDC

Communicates with the MDC via a RS232C MDC cable.

- RJ45 MDC

Communicates with the MDC via an RJ45 MDC cable.

# MDC Programmeme Installation/Uninstallation

MDC installation can be affected by the graphics card, mother board and network conditions.

If a software installation window is not displayed on the main screen, install with the MDC Unified execution file in the MDC folder on the CD.

If the directory path is not specified, the programme will be installed in the default directory path.

Select "Launch MDC Unified" and click "Finish" to run the MDC programme immediately.

- The MDC execution icon may not be displayed depending on the PC system or product specifications.
- Press F5 if the execution icon is not displayed.

# Installation

- Insert the installation CD into the CD-ROM drive.
- 2 Click the MDC Unified installation programme.
- 3 Select a language for installation. Next, click "OK".
- 4 When the "Welcome to the InstallShield Wizard for MDC\_Unified" screen appears, click "Next".
- 5 In the "Licence Agreement" window displayed, select "I accept the terms in the licence agreement" and click "Next".
- 6 In the displayed "Customer Information" window, fill out all the information fields and click "Next".
- 7 In the displayed "Destination Folder" window, select the directory path you want to install the programme in and click "Next".
- 8 In the displayed "Ready to Install the Programme" window, check the directory path to install the programme in and click "Install".
- 9 Installation progress will be displayed.
- 10 Click "Finish" in the displayed "InstallShield Wizard Complete" window.
- 11 The MDC Unified shortcut icon will be created on the desktop after installation.

#### Uninstallation

- Select **Settings** > **Control Panel** on the **Start** menu and double-click **Add/Delete Programme**.
- 2 Select MDC Unified from the list and click Change/Remove.

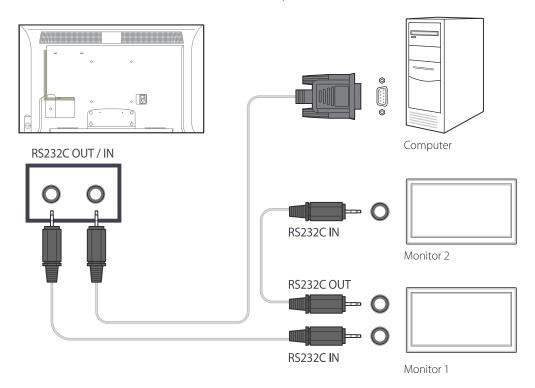
Multiple display control "MDC" is an application that allows you to easily control multiple display devices simultaneously using a PC.

# What is MDC?

# **Connecting to MDC**

# Using MDC via RS-232C (serial data communications standards)

An RS-232C serial cable must be connected to the serial ports on the PC and monitor.

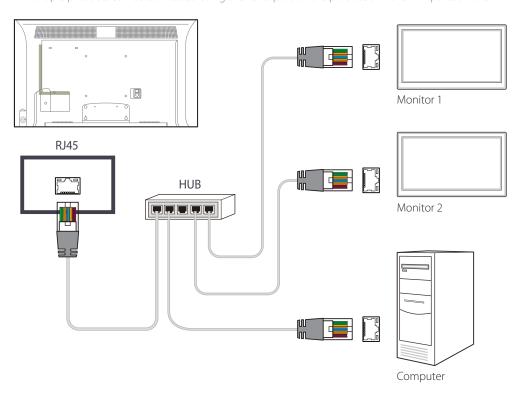


# **Using MDC via Ethernet**

Enter the IP for the primary display device and connect the device to the PC. One display device can connect to another using an RS-232C serial cable.

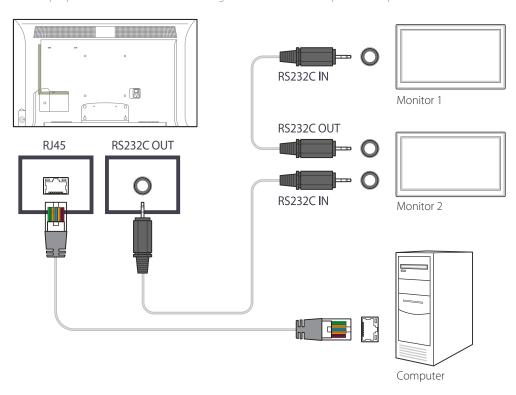
#### Connection using a direct LAN cable

Multiple products can be connected using the **RJ45** port on the product and the LAN ports on the HUB.



## Connection using a cross LAN cable

— Multiple products can be connected using the **RS232C IN / OUT** port on the product.



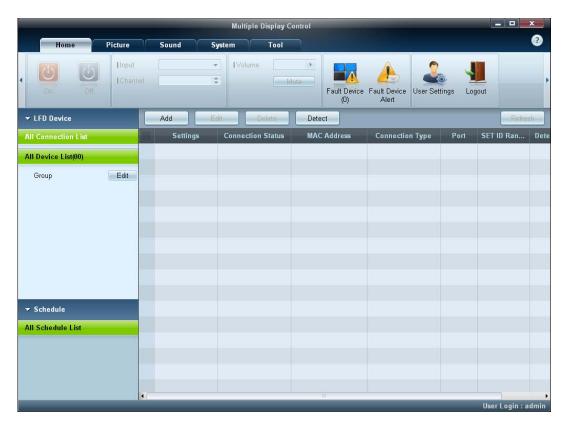
# **Connection Management**

Connection management includes the **Connection list** and **Connection list** modification options.

**Connection list** - Connection list shows the details of the connections such as connection setting (IP/COM, Port No, MAC, and Connection Type), connection status, **Set ID Range**, and detected devices.

Each connection can contain a maximum of 100 devices connected in serial daisy-chain fashion. All the LFDs detected in a connection are displayed in the Device list, where the user can make groups and send commands to detected devices.

Connection list modification options - Connection modification options includes Add, Edit, Delete, and Refresh.



# **User Login**

Launching the programme displays the user login window.

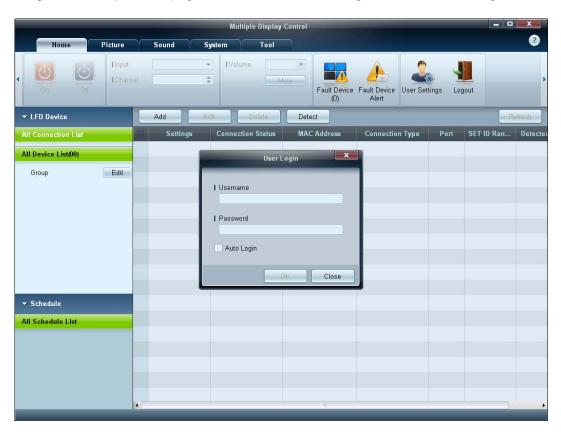
The initial login ID (password: admin) and password (Auto Login: admin) are set to admin.

After logging in for the first time, make sure to change the password to ensure security.

To change the password, go to **Home** > **User Settings**.

After you are logged in, [User Login: admin] appears at the right bottom of the programme.

To log in automatically when the programme restarts, select the **Auto Login** checkbox in the **User Login** window.



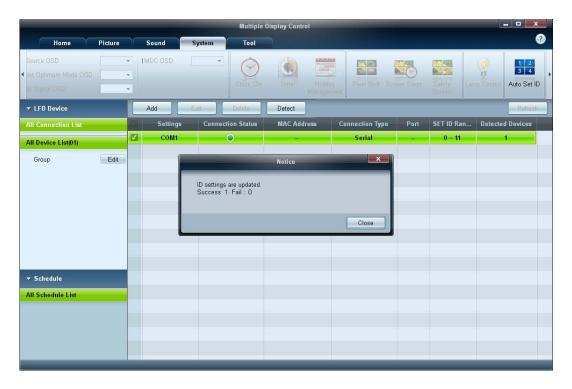
## **Auto Set ID**

**Auto Set ID** feature assigns a Set ID for all the LFDs connected in daisy-chain of a selected connection.

There can be a maximum of 100 LFDs in a connection.

The Set ID is assigned sequentially in the daisychain running from 1 to 99, and then finally to Set ID 0.

— ID for the last 100th LFD is set to 0.

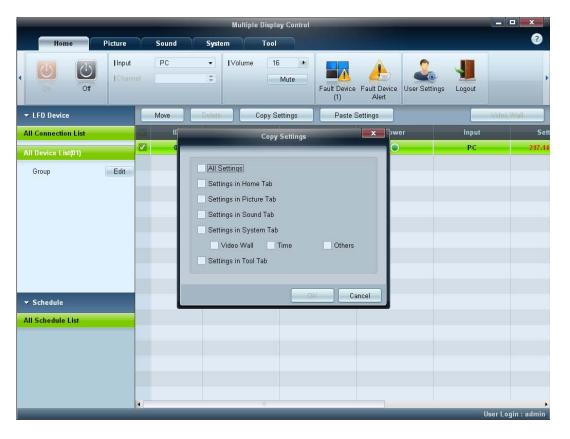


# **Cloning**

Using the **Cloning** feature, you can copy the setting of one LFD and apply it to multiple selected LFDs.

You can select specific tab categories or all tab categories for cloning, using the copy setting option window.

To delete the settings you have configured, click the **Paste Settings** button.

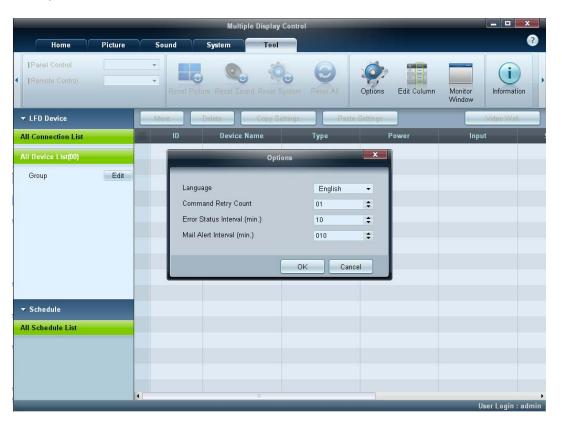


# **Command Retry**

This feature is used to specify the maximum number of times the MDC command will be retried in case of there being no reply or a corrupted reply from an LFD.

The retry count value can be set using the MDC options window.

The retry count value must be between 1-10. The default value is 1.



# **Getting Started with MDC**



Add Connection Add Connection Ethernet Serial Ethernet I COM Port COM1 ▼ I IP Address 107 - 108 - 12 - 5 I SET ID Range I Port Number 00 \$ ~ 10 \$ 1515 I SET ID Range 00 \$ ~ 10 \$ Cancel Cancel To start the programme, click **Start**  $\rightarrow$  **Programmes**  $\rightarrow$  **Samsung**  $\rightarrow$  **MDC Unified**.

The login window appears after the MDC programme is launched.

Enter the user ID and password.

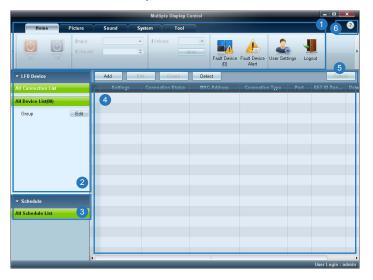
- The default user ID and password are **admin**.
- Make sure to change the password after the first login.

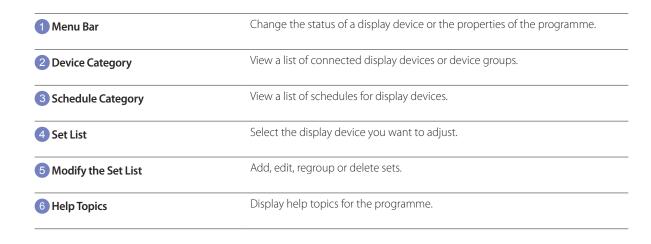
2 Click **Add** to add a display device.

**SET ID Range**: Select a range of the unique ID assigned to a monitor.

- If the connection is established via RS232C, go to **Serial** and specify the **COM Port**.
- If the connection is established via **Ethernet**, enter the IP that was entered for the display device.

# **Main Screen Layout**





#### Menus

## Home



You can power on or off a selected device or change the input source or volume of the device.

Choose display devices from the list of sets, and select the **Home** tab.

Select an item and change the corresponding setting.

#### Power

- On: Power on a selected display.
- Off: Power off a selected display.

#### Input

- Input Source : Change the input source.
  - Input sources available can vary depending on the Display Device Models.
  - The input source can be changed only for displays that are turned on.
- Channel: Change the channel.
  - The TV channel can be changed by using the up/down arrow keys.
  - The channel can be changed only when the input source is **TV**.
  - Only registered channels can be selected.
  - Only applicable to models that support TVs.

## **Volume**



The volume can be changed or the sound can be muted only for displays that are turned on.

#### Volume

- Adjust the volume of a selected display.
- The volume can be adjusted using the slider bar in the range of 0 to 100.

#### Mute

Enable or disable Mute for a selected display.
 Mute will automatically be disabled if Volume is adjusted when Mute is on.

## **Alert**



#### **Fault Device**

- This menu shows a list of display devices which have following errors fan error, temperature error, brightness sensor error, or lamp error.
- Select a display device from the list. The **Repair** button will be enabled.
- Click the **Refresh** button to refresh the error status of the display device. The recovered display device will disappear from the **Fault Device List**.

#### **Fault Device Alert**

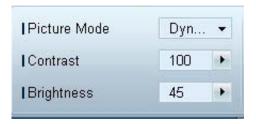
- Display device in which error is detected will be reported by email.
- Fill in all required fields. The **Test** and **OK** buttons will be enabled.
   Ensure the **Sender** information and at least one **Recipient** are entered.

# **User Login**



# **Screen Adjustment**

## Custom



#### **User Settings**

• Add, delete or edit login information.

#### Logout

- Log out from the current user account as follows.
- Click Logout. The message "Do you want to log admin out?" is displayed
- Click **Yes**. The user login window appears.
- If you do not want to log in, click **Close**. The programme is closed.
  - If you close the programme using **Logout**, the login window will appear prompting you to enter user information even if the **Auto Login** checkbox is selected.

The screen settings (contrast, brightness, etc.) can be adjusted.

Choose display devices from the list of sets, and select the **Picture** tab.

Select an item and change the corresponding screen setting.

#### Picture Mode

• Adjust the picture mode for the selected display device.

#### **Contrast**

• Adjust the contrast for the selected display device.

#### **Brightness**

• Adjust the brightness for the selected display device.

## Color



- Color and Tint (G/R) are not available if the input source is PC.
- Color, Tint (G/R), Color Tone and Color Temp. are not available if both PC Source and Video Source are selected.

## **Options**



#### Color

• Adjust the colours for the selected display device.

#### Tint (G/R)

• Adjust the tint for the selected display device.

#### **Color Tone**

• Adjust the background colour tone for the selected display device.

#### Color Temp.

• Adjust the colour temperature for the selected display device.

This option is enabled if **Color Tone** is set to **Off**.

#### **HDMI Black Level**

• Adjust the **HDMI Black Level** for the selected display device.

#### **Auto Motion Plus**

This option is used to view dynamic images.

- Off: Disable the Auto Motion Plus function.
- **Clear**: Set the level of **Auto Motion Plus** to clear. This mode is suitable to display vivid images.
- Standard: Set the level of Auto Motion Plus to standard.
- Smooth: Set the level of Auto Motion Plus to smooth. This mode is suitable to display smooth images.
- **Custom**: Customize the level of screen burn-in or flickering.
- **Demo**: This function demonstrates the technology of **Auto Motion Plus**. The result when the mode is changed can be previewed on the left side of the window.
  - Auto Motion Plus may not be available depending on the product.
- **Detail**: View detailed information about the selected display device.

#### **Brightness Sensor**

- Enable or disable the **Brightness Sensor** for the selected display device.
- The Brightness Sensor detects the ambient light intensity and automatically adjusts the screen brightness.
  - Brightness Sensor may not be available depending on the product.



## Size



#### **MPEG Noise Filter**

Reduces MPEG noise to provide improved picture quality.

• Off / Low / Medium / High / Auto

#### **Smart LED**

Controls the LED backlight to maximize picture clarity.

#### Cinema Black

In Movie mode, this feature dims the top and bottom areas of the video image to provide a more immersive viewing experience.

- Off: Turns off the Cinema Black feature.
- On: Adjusts the dimming of the top and bottom areas of the screen according to the video.

#### **Picture Size**

- Adjust the screen size for the selected display device.
- The **Detail** item will be disabled if **Picture Size** is set to a mode that does not support detailed configuration.
- The -/+ buttons can be used to adjust Zoom.
- The screen can be relocated using the up/down/left/right buttons.

#### **Detail**

• You can view details of the selected screen size.

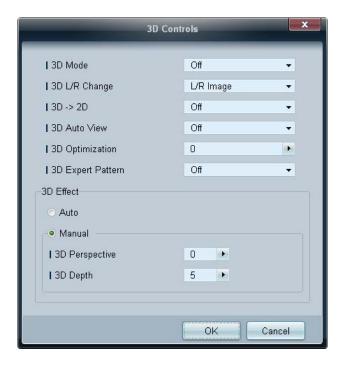
#### **PC Screen Adjustment**

- Frequency adjustment or fine-tuning is available by using the -/+ buttons in **Coarse** or **Fine**.
- To relocate the screen, click one of the four images below **Position**.
- To automatically adjust the frequency, fine-tune or relocate the screen, click **Auto Adjustment**.

## **Advanced features**



# **3D Control**



#### 3D Mode

Select the 3D input format.

### 3D L/R Change

Swap the left and right pictures.

#### $3D \mathop{\rightarrow} 2D$

Displays the image for the left eye only.

#### **3D Auto View**

If you set 3D Auto View to Message Notice, a pop up message window appears when the product receives a 3D signal.

#### **3D Optimization**

The overall adjustment of 3D effect.

### **3D Expert Pattern**

View a 3D pattern.

#### 3D Effect

Adjust 3D effects like perspective and depth for your preferred 3D viewing experience.

- Auto: Automatically adjust the perspective and depth settings in accordance with the 3D input source.
- Manual: Manually adjust the perspective and depth settings.

# **Advanced Settings**



#### **Dynamic Contrast**

Adjust the screen contrast.

#### **Gamma Control**

Adjust the primary colour intensity.

#### **RGB Only Mode**

Displays the **Red**, **Green** and **Blue** colour for making fine adjustments to the hue and saturation.

#### Flesh Tone

Emphasize pink "Flesh Tone."

#### **Motion Lighting**

Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.

#### **LED Motion Plus**

Removes blur and judder from scenes with larger amounts of rapid movement to provide a clearer picture.

## **Color Space**

Adjusts the range and variety of colour (the colour space) available to create images.

- Auto / Native / Custom
  - To adjust Color, Red, Green, Blue and Reset, set Color Space to Custom.

#### **White Balance**

Adjust the colour temperature for a more natural picture.

- R-Offset / G-Offset / B-Offset
  - Adjust each colour (red, green, blue) darkness.
- R-Gain / G-Gain / B-Gain

Adjust each colour (red, green, blue) brightness.

Reset

Resets the White Balance to it's default settings.

# **Sound Adjustment**



- The **Bass** or **Treble** item will be disabled if the item is not supported by the selected set.

You can change the sound settings.

Choose display devices from the list of sets, and select the **Sound** tab.

#### Bass

• Adjust the bass for the selected display.

#### Treble

• Adjust the treble for the selected display.

#### Balance(L/R)

• Adjust the volume of the left and right speakers of the selected display device.

#### **SRS TS XT**

• Enable or disable the **SRS TS XT** effect for the selected display device.

# **System Setup**

## **Video Wall**



Choose display devices from the list of sets, and select the **System** tab.

The **Video Wall** function can be used to display part of a whole picture or repeat the same picture on each of connected multiple display devices.

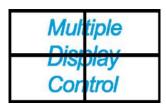
**Video Wall** is enabled only when devices are in the group.

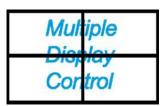
#### Video Wall

• Enable or disable Video Wall.

#### **Format**

• Select the format to display the split screen.









Full

Natural

#### Н

- Select the number of horizontal display devices.
- A maximum of 15 displays can be arranged in a row.
  - A maximum of 6 can be assigned to **V** if 15 is assigned to **H**.

#### ٧

- Select the number of vertical display devices.
- A maximum of 15 displays can be arranged in a row.
  - A maximum of 6 can be assigned to **H** if 15 is assigned to **V**.

#### **Screen Position**

- View the layout of displays (configured by the screen divider) or change the layout as required.
- Screen Position and Preview are enabled when Video Wall is set to on.
- Note that if multiple sets are selected, **Preview** is enabled only if the settings for **H** and **V** match the layout of the selected sets.
- To change the **Position**, select a set and drag it to a new position.
  - The range of screen divider settings may differ depending on the model.

#### PIP



- Basic information required to adjust PIP will appear in the menu screen.
- PIP will be disabled when Video Wall is On.
- Note that **Picture Size** is disabled when PIP is **On**.

#### PIP Size

• View the **PIP Size** of the current display.

#### **PIP Source**

• Select a PIP input source.

#### **Sound Select**

• Select and enable the sound from either the primary screen or secondary screen.

#### Channel

• The channel can be changed if **PIP Source** is **TV**.

## General



#### **User Auto Color**

- Automatically adjust the screen colours.
  - Available only in **PC** mode.

#### **Auto Power**

• Set the product to automatically power on.

#### **Standby Control**

• Set the standby mode to activate if an input source is not detected.

## Fan & Temperature



Configure the settings required to detect the fan speed and internal temperature for the product's protection.

#### **Fan Control**

• Select a method to configure the fan speed.

#### **Fan Speed Setting**

• Configure the fan speed.

#### **Temperature**

• Detect the internal temperature by specifying the range of temperature.

## Security



#### Safety Lock

- Lock the on-screen menus.
  - To unlock the menus, set **Safety Lock** to **Off**.

#### **Button Lock**

- Lock the buttons on the display device.
  - To unlock the buttons, set **Button Lock** to **Off**.

## **OSD Display**



#### Source OSD

• Select whether to display a message when the **Source** is changed.

#### Not Optimum Mode OSD

• Select whether to display a message when a non-compatible mode is selected.

#### **No Signal OSD**

• Select whether to display a message when there is no input signal.

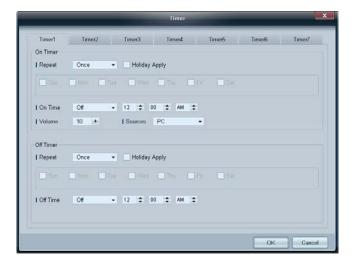
#### MDC OSD

• Select whether to display a message when settings are changed by the MDC.

#### Time



## **Timer**



#### **Clock Set**



Change the current time on the selected display device according to the time set on a PC.

If the time is not set on the display device, null values will be displayed.

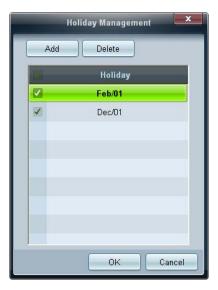
#### **On Timer**

- Repeat: Specify the period for which you want to repeat the selected Timer.
   Once, EveryDay, Mon~Fri, Mon~Sat, Sat~Sun, Manual
- Holiday Apply: The Holiday Management settings can be applied to the Timer.
- On Time: Set the time to power on the selected display device.
- Volume: Specify the volume of the display device when it is powered on by On Time.
- **Source**: Specify the input source of the display device when it is powered on by **On Time**.

#### **Off Timer**

- Repeat: Specify the period for which you want to repeat the selected Timer.
   Once, EveryDay, Mon~Fri, Mon~Sat, Sat~Sun, Manual
- Holiday Apply: The Holiday Management settings can be applied to the Timer.
- Off Time: Set the time to power off the selected display device.
  - The checkboxes to select days of the week below **Repeat** are enabled only if **Manual** is selected.

## **Holiday Management**



### **Screen Burn Protection**



**Holiday Management** allows you to prevent devices that are set to be powered on by the **Timer** from turning on at a specified date.

The **Holiday Management** function can be enabled or disabled in the **Timer** settings menu.

Add: You can specify holidays.
 Click the Add button in the Holiday Management window.



- **Delete**: Delete holidays. check the corresponding checkboxes and click this button.
- List of holidays: View a list of holidays you have added.

#### **Pixel Shift**



Move the screen slightly at specified time intervals to prevent screen burn-in.

#### **Screen Saver**





Period (Hour) and Time (Sec) can be configured when Repeat is selected.



— Start Time and End Time can be configured when Interval is selected.

This function prevents screen burn-in when the screen of the selected display device is left idle for an extended period of time.

Timer: You can set the timer for Screen Saver.

- Off
- Repeat: Display the image retention-preventive pattern set in Mode at specified time intervals (Period).
- Interval: Display the image retention-preventive pattern set in Mode for a specified period of time (from Start Time to End Time).
- Mode: Select a screen protective pattern to display.
- **Period (Hour)**: Specify the time interval to activate the **Screen Saver** function.
  - The option is enabled when **Repeat** is selected for **Timer**.
- Time (Sec): Specify the duration to keep the Screen Saver function on.
  - The option is enabled when **Repeat** is selected for **Timer**.
- **Start Time**: Set start time to display screen saver.
  - The option is enabled when **Interval** is selected for **Timer**.
- End Time: Set end time to display screen saver.
  - The option is enabled when **Interval** is selected for **Timer**.

#### Safety Screen



The **Safety Screen** function can be used to prevent screen burn-in when a stationary image displays on the screen of a display device for an extended period of time.

#### **Lamp Control**



**Lamp Control** is used to adjust the backlight to reduce power consumption.

Automatically adjust the backlight of the selected display device at a specified time.

If Manual Lamp Control is adjusted, Auto Lamp Control will automatically switch to Off.

Manually adjust the backlight for the selected display.

If **Auto Lamp Control** is adjusted, **Manual Lamp Control** will automatically switch to **Off**.

• **Ambient Light**: **Ambient Light** detects ambient light intensity and automatically adjusts the screen brightness of all the LFDs in the same serial chain.

## **Ticker**



Input text while a video or image is displayed and display the text on the screen.

#### Ticker

Enable or disable **Ticker**.

• Off / On

#### Message

Enter a message to display on the screen.

#### **Timer**

Set the **Start Time** and **End Time** to display a message (**Message**).

#### **Position**

Select an orientation to display a message (Message) from Horizontal and Vertical.

#### Motion

Specify the **Direction** and **Speed** to display a message (**Message**).

#### **Font Options**

Specify the message Size, Foreground Color, Foreground Opacity, Background Color and Background Opacity.

## **Tool Settings**

## **Security**



### Reset

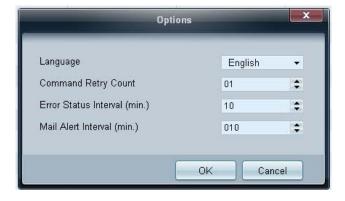


- Panel Control: Turn on or off the screen of a display device.
- Remote Control: Enable or disable the remote control.

- Reset Picture: Reset the screen settings.
- Reset Sound: Reset the sound settings.
- Reset System: Reset the system settings.
- Reset All: Reset the screen, sound and system settings at the same time.

## **Edit Column**

#### **Options**



Configure the settings for the items that will be displayed on the list of displays.

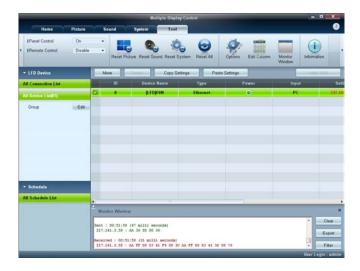
- Language: Select a language to use in the MDC programme. After selecting a language, restart the MDC programme to use the selected language.
- Command Retry Count: Specify the number of retry attempts when a command fails.
- Error Status Interval: Specify the time interval to query the display device in order to check if "Fault Device" has occurred.
- Mail Alert Interval: Specify the time interval for email notifications in the event when "Fault Device" occurs.

#### **Edit Column**

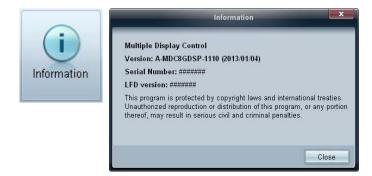


Select the items you want to display in the list of sets.

#### **Monitor Window**



#### Information



A window appears showing details for data transfer between the computer and display devices.

Filter



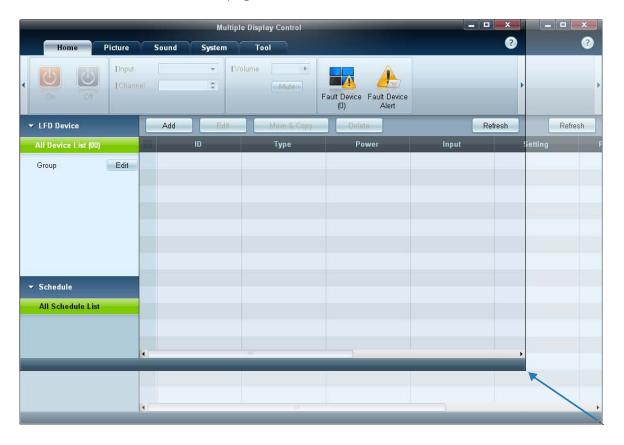
View the programme information.

## **Other Functions**

## **Resizing a Window**

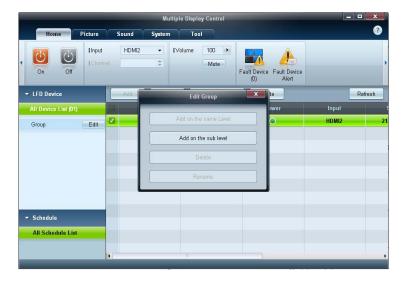
Place the mouse pointer on a corner of the programme window. An arrow will appear.

Move the arrow to customize the size of the programme window.



## **Group Management**

## **Creating Groups**





- The **Add on the same level** button is enabled only if at least one group is created.

Create groups and manage the list of sets on a group basis.

— Duplicate group names cannot be used.

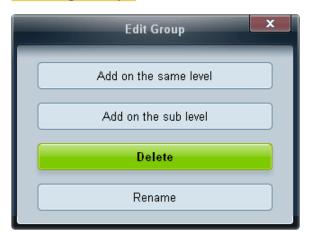
1 Right-click and select  $Group \rightarrow Edit$  in the display device list section on the left side of the programme window.

- 2 In the Edit Group window displayed, click Add on the same level or Add on the sub level.
- Add on the same level: Create a group on the same level as the selected group.



- Add on the sub level: Create a sub-group under the selected group.
- 3 Enter the group name.

## **Deleting Groups**



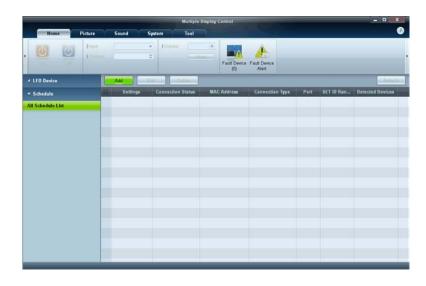
- Select a group name, and click **Edit**.
- In the **Edit Group** window displayed, click **Delete**.
- 3 Click **Yes**. The group will be deleted.

## **Renaming Groups**



- 1 Select a group name, and click **Edit**.
- 2 In the **Edit Group** window displayed, click **Rename**.
- 3 If a cursor appears in the old group name, enter a new group name.

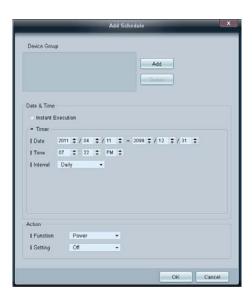
## **Schedule Management**



## **Creating Schedules**

Create and register a schedule on a group basis.

Click **All Schedule List** in the schedule section on the left side of the programme window. The **Add** button will be enabled in the middle.





- 2 Click the **Add** button. The **Add Schedule** window will appear.
- 3 Click **Add** below the **Device Group** item, and select the group you want to add a schedule to.

- 4 Select **Date&Time/Action** and click **OK**. The schedule will be added and a list of schedules will appear in the set list window.
  - Device Group: Select a group.
  - Date&Time

**Instant Execution**: Run the schedule immediately.

**Timer**: Set the date, time and interval to run the schedule.

- **Action**: Select a function that will activate at the specified time and interval.

## **Schedule Modification**

To modify a schedule, select the schedule and click **Edit**.

## **Deleting a Schedule**

To delete a schedule, select the schedule and click **Delete**.

## **Troubleshooting Guide**

_	This programme may malfunction
	sometimes due to a communication
	problem between the PC and display
	or electromagnetic waves emitted from
	nearby electronic devices.

#### Solution

The display you want to control does not appear on the system information chart.

Issue

- 1 Check the connection of the RS232C cable (check that the cable is properly connected to appropriate serial port).
- 2 Check that another display with a duplicate ID is not connected. Connecting displays with a duplicate ID can cause the displays not to be shown due to data collision.
- 3 Check that the display ID is within the range of 0 and 99. (Change the ID using the Display menu.)

For a display that supports the ID in a range of 0 to 99, the **ID** should be set between 0 and 99.

The display you want to control does not appear on the other Control Info Grids.

Check that the display is powered on. (See the power status in the system information chart.)

Ensure you select the input source the display is connected to.

The following message appears repeatedly.

Check that the display you want to control is selected.



Displays power on or off at different time from one another even though On Time or Off Time is set.

Adjust the time on the PC to synchronize the time between the connected displays.

The remote control does not work.

The remote control may not work if the RS-232C cable is removed or the programme is closed abnormally while the **Remote Control** function is **Disable**. To resolve this, run the programme again and set **Remote Control** to **Enable**.

## How display properties are shown when multiple displays are used

- 1 When no display is selected: The default value is displayed.
- 2 When one display is selected: Settings for the selected display are displayed.
- When two displays are selected (e.g. in sequence of ID 1 and ID 3): The settings for ID 1 are displayed before the settings for ID 3.
- 4 When the **All+Select** checkbox is checked and all displays are selected: The default settings are displayed.

## **Chapter 05 Screen Adjustment**

Configure the Picture settings (Backlight, Colour Tone, etc.)

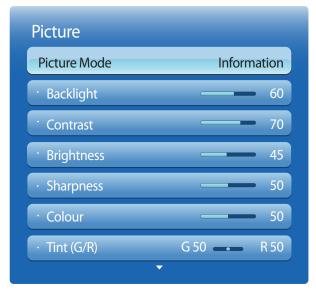
- The layout of the **Picture** menu options may vary depending on the produc

## **Picture Mode**

MENUⅢ → Picture → Picture Mode → ENTER 🔫

Select a picture mode (**Picture Mode**) suitable for the environment where the product will be used.

Different **Picture Mode** options are displayed depending on the current input source.



## If the input source is PC, DVI

- Information: This mode reduces eye fatigue and is suitable for displaying information to the public.
- Advertisement: This mode is suitable for displaying video content and indoor/outdoor advertisements.

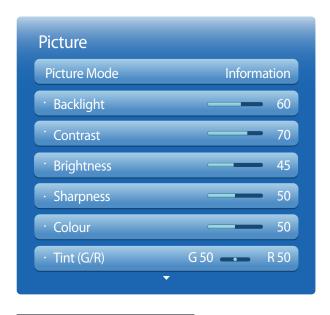
## If the input source is AV, Component, HDMI

- **Dynamic**: This mode is suitable when the ambient light is bright.
- Standard: This mode is generally suitable for any environment.
- Natural: Suitable for reducing eye strain.
- Movie: This mode reduces eye fatigue.

<sup>-</sup> The displayed image may differ depending on the model.

## Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)

MENUⅢ → Picture → ENTER 🕞



<sup>-</sup> The displayed image may differ depending on the model.

Your product has several options for adjusting picture quality.

Input source	Picture Mode	Adjustable options	
PC, DVI, HDMI (when a PC is connected)	Information	Backlight / Contrast / Brightness / Sharpness	
	Advertisement	Backlight / Contrast / Brightness / Sharpness / Colour	
AV, Component, HDMI	Dynamic, Standard, Natural, Movie	Backlight / Contrast / Brightness / Sharpness / Colour / Tint (G/R)	

When you make changes to **Backlight**, **Contrast**, **Brightness**, **Sharpness**, **Colour** or **Tint** (**G/R**), the OSD will be adjusted accordingly.

You can adjust and store settings for each external device you have connected to an input on the product.

Lowering picture brightness reduces power consumption.

## **Screen Adjustment**

MENUⅢ → Picture → Screen Adjustment → ENTER 🗗



<sup>-</sup> The displayed image may differ depending on the model.

choose size and aspect ratio picture displayed on screen.

#### **Picture Size**

Different **Screen Adjustment** options are displayed depending on the current input source.

- 16:9: Sets the picture to 16:9 wide mode.
- **Zoom1**: Use for moderate magnification. Cuts off the top and sides.
- **Zoom2**: Use for a stronger magnification.
- Smart View 1: Reduces the 16:9 picture by 50%.
  - Smart View 1 is enabled only in HDMI mode.
- Smart View 2: Reduces the 16:9 picture by 25%.
  - Smart View 2 is enabled only in HDMI mode.
- Wide Fit: Enlarges the aspect ratio of the picture to fit the entire screen.
- 4:3: Sets the picture to basic (4:3) mode.
- Do not set your product to **4:3** format for a long time.
  - The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.
- Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.
- **Custom**: Changes the resolution to suit the user's preferences.
- Original ratio: If the input source is PC, DVI, HDMI(PC connection), the video will display in the original aspect ratio.
  - Available ports may differ depending on the model.

## Picture Sizes available by Input Source.

Picture Size	
16:9, Zoom1, Zoom2, 4:3, Custom	
16:9, Wide Fit, Screen Fit, 4:3 , Custom	
16:9, Smart View 1, Smart View 2, Wide Fit, 4:3, Screen Fit, Custom	
16:9, Zoom1, Zoom2, Smart View 1, Smart View 2, 4:3, Custom	
16:9, 4:3, Original ratio	

## **Position**



- The displayed image may differ depending on the model.

### **Zoom/Position**



- The displayed image may differ depending on the model.

Adjusts the picture position. Position is only available if Picture Size is set to Zoom1, Zoom2, Wide Fit, Screen Fit or Custom.

To use the **Position** function after selecting **Zoom1**, **Zoom2**, **Wide Fit** or **Screen Fit**, follow these steps.

- 1 Press the ▼ button to select **Position**. Press the **🗗** button.
- Press the ▲ or ▼ button to move the picture up or down.
- 3 Press the 🗗 button.

- To use the **Zoom/Position** function after selecting **Screen Fit** in **HDMI** (1080i/1080p) or **Component** (1080i/1080p) or **Custom**, follow these steps.
- Press the ▼ button to select **Zoom/Position**. Press the **🕒** button.
- 2 Select the **Zoom** or **Position**. Press the 🖼 button.
- **3** Press the  $\triangle/\nabla/\triangle/$  button to move the picture.
- 4 Press the 🗗 button.
  - If you want to reset the picture to its original position, select **Reset** in the **Zoom/Position** screen. The picture will be set to its default position.

## **PC Screen Adjustm**



- Available in **PC** mode only.
- The displayed image may differ depending on the model.

## **Resolution Select**



- Available in **PC** mode only.
- The displayed image may differ depending on the model.

#### Coarse / Fine

Removes or reduces picture noise.

If the noise is not removed by Fine-tuning alone, use the **Coarse** function to adjust the frequency as best as possible (**Coarse**) and Fine-tune again. After the noise has been reduced, re-adjust the picture so that it is aligned with the Centre of screen.

#### Position

To adjust the PC's screen position if it is not Centreed or does not fit the product screen.

Press the ▲ or ▼ button to adjust the Vertical Position. Press the ◀ or ▶ button to adjust the Horizontal Position.

#### Image Reset

Resets the image to the default settings.

If the picture is not normal even when the resolution of the graphics card is one of the following, you can optimize the picture quality by selecting the same resolution for the product as the PC using this menu.

Available resolutions: Off / 1024x768 / 1280x768 / 1360x768 / 1366x768

## **Auto Adjustment**

MENUⅢ → Picture → Auto Adjustment → ENTER 🗗



- Available in **PC** mode only.
- The displayed image may differ depending on the model.

## **Rotation**

 $\mathsf{MENU} \boxplus \to \mathsf{Picture} \to \mathsf{Rotation} \to \mathsf{ENTER} \; \blacksquare$ 



- The displayed image may differ depending on the model.

Adjust frequency values/positions and fine tune the settings automatically.

Rotate the product screen orientation.

- Landscape: Display the screen in landscape mode (default).
- **Portrait**: Display the screen in portrait mode.
  - Available in **PC/DVI/HDMI/MagicInfo** mode.

## **Aspect Ratio**

 $\mathsf{MENU} \boxplus \to \mathsf{Picture} \to \mathsf{Aspect} \ \mathsf{Ratio} \to \mathsf{ENTER} \ \boxdot$ 



<sup>-</sup> The displayed image may differ depending on the model.

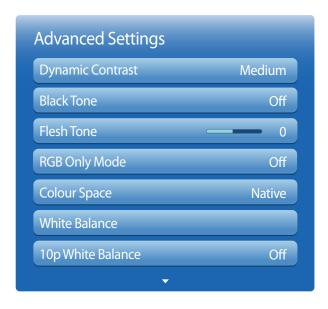
Set the rotated screen to be either full screen or original.

- Full Screen: Display the rotated screen in full screen.
- Original: Display the rotated screen in the original aspect ratio.

— Available only when **Rotation** is set to **Portrait**.

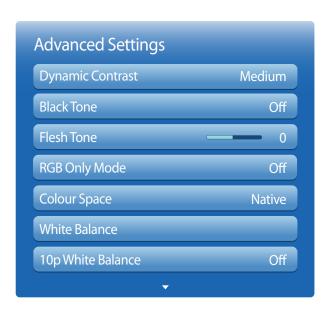
## **Advanced Settings**

 $\mathsf{MENU} \longrightarrow \mathbf{Picture} \to \mathbf{Advanced} \ \mathbf{Settings} \to \mathbf{ENTER} \ \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

Input Source	Picture Mode	Advanced Settings	
PC, DVI, HDMI (when a PC is connected)	Information	White Balance / Gamma	
,	Advertisement	Dynamic Contrast / Black Tone / Flesh Tone / Colour Space / White Balance / Gamma	
AV, Component, HDMI	Natural, Dynamic	Not available	
AV	Standard	Dynamic Contrast / Black Tone / Flesh Tone / RGB Only Mode / Colour Space / White Balance / Gamma / Motion Lighting	
	Movie	Dynamic Contrast / Black Tone / Flesh Tone / RGB Only Mode / Colour Space / White Balance / 10p White Balance / Gamma	
Component, HDMI	Standard	Dynamic Contrast / Black Tone / Flesh Tone / RGB Only Mode / Colour Space / White Balance / Gamma / Motion Lighting	
	Movie	Dynamic Contrast / Black Tone / Flesh Tone / RGB Only Mode / Colour Space / White Balance / 10p White Balance / Gamma	



<sup>-</sup> The displayed image may differ depending on the model.

## **Dynamic Contrast**

Adjust the screen contrast.

• Off / Low / Medium / High

## **Black Tone**

Select the black level to adjust the screen depth.

Off / Dark / Darker / Darkest

### Flesh Tone

Emphasize pink Flesh Tone.

## **RGB Only Mode**

Displays the **Red**, **Green** and **Blue** colour for making fine adjustments to the hue and saturation.

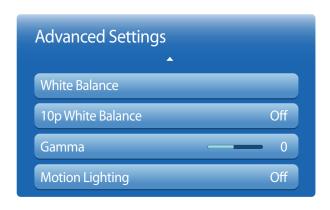
• Off / Red / Green / Blue

## **Colour Space**

Adjusts the range and variety of colours (the colour space) available to create images.

Auto / Native / Custom

To adjust Colour, Red, Green, Blue and Reset, set Colour Space to Custom.



<sup>-</sup> The displayed image may differ depending on the model.

### **White Balance**

Adjust the colour temperature for a more natural picture.

- R-Offset / G-Offset / B-Offset: Adjust each colour's (red, green, blue) darkness.
- R-Gain / G-Gain / B-Gain: Adjust each colour's (red, green, blue) brightness.
- Reset: Resets the White Balance to its default settings.

## 10p White Balance

Controls the white balance in 10 point interval by adjusting the red, green, and blue brightness.

Off / On

**Interval**: Select interval to adjust.

**Red**: Adjust the red level.

**Green**: Adjust the green level.

Blue: Adjust the blue level.

**Reset**: Resets the **10p White Balance** to its default settings.

Available when the **Picture Mode** is set to **Movie** and when the external input is set to all input.

— Some external devices may not support this function.

#### Gamma

Adjust the primary colour intensity.

## **Motion Lighting**

Reduces power consumption by reducing screen brightness when the picture on the screen is in motion.

Off / On

## **Picture Options**

 $\mathsf{MENU} \boxplus \to \mathsf{Picture} \to \mathsf{Picture} \, \mathsf{Options} \to \mathsf{ENTER} \, \blacksquare$ 

Picture Options		
Colour Tone	Standard	
Colour Temp.	10000K	
Digital Noise Filter	Off	
MPEG Noise Filter	Off	
HDMI Black Level	Normal	
Film Mode	Off	
Motion Plus	Off	

<sup>-</sup> The displayed image may differ depending on the model.

Select an option using the ▲ and ▼ arrow keys, and the press ♣.

Use the arrow keys to change the setting, and then press ♣.

Input source	Picture Mode	Picture Options  Colour Tone / Colour Temp. / HDMI Black Level / Dynamic Backlight	
PC, DVI	Information		
	Advertisement	Colour Tone / Colour Temp. / Digital Noise Filter / MPEG Noise Filter / HDMI Black Level / Motion Plus (for MD55C models only) / Dynamic Backlight	
HDMI(when a PC is connected)	Information	Colour Tone / Colour Temp. / HDMI Black Level / Dynamic Backlight	
	Advertisement	Colour Tone / Colour Temp. / Digital Noise Filter / MPEG Noise Filter / HDMI Black Level / Motion Plus (for MD55C models only) / Dynamic Backlight	
HDMI Dynamic, Standard, Natu Movie		Colour Tone / Colour Temp. / Digital Noise Filter / MPEG Noise Filter / HDMI Black Level / Motion Plus (for MD55C models only) / Dynamic Backlight	
AV, Component, HDMI(1080i),	Dynamic, Standard, Natural, Movie	Colour Tone / Colour Temp. / Digital Noise Filter / MPEG Noise Filter / Film Mode / Motion Plus (for MD55C models only) / Dynamic Backlight	



<sup>-</sup> The displayed image may differ depending on the model.

## **Colour Tone**

If the input source is **PC**, **DVI** or **HDMI** (PC connection).

Off / Cool / Standard / Warm

If the input source is AV, Component, HDMI.

- Off / Cool / Standard / Warm1 / Warm2
  - Warm1 or Warm2 will be deactivated when the Picture Mode is Dynamic.
  - Settings can be adjusted and stored for each external device connected to an input on the product.

## Colour Temp.

Adjust the colour temperature (Red/Green/Blue). (Range: 3000K-15000K)

This option is available when **Colour Tone** is set to **Off**.

## **Digital Noise Filter**

If the broadcast signal received by your product is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

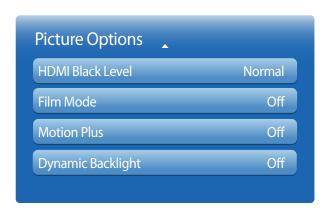
• Off / Low / Medium / High / Auto

#### **MPEG Noise Filter**

Reduces MPEG noise to provide improved picture quality.

Off / Low / Medium / High / Auto

When the signal is weak, try all the options until the the product displays the best picture.



#### **HDMI Black Level**

Selects the black level on the screen to adjust the screen depth.

Normal / Low

Available only in **HDMI** and **DVI** mode (AV Timing : 480p, 576p, 720p, 1080i, 1080p).

### Film Mode

This mode is suitable to view movies.

Sets the product to automatically sense and process film signals from all sources and adjust the picture for optimum quality.

Off / Auto1 / Auto2

Available in **AV**, **Component**, **HDMI**(1080i).

## Motion Plus (for MD55C models only)

Removes blur and judder from scenes with larger amounts of rapid movement to provide a clearer picture.

The menu names may vary depending on the country.

Off: Switches Motion Plus off.

**Clear**: Sets **Motion Plus** to **Clear** (suitable for viewing moving images clearly) mode.

Standard: Sets Motion Plus to Standard mode.

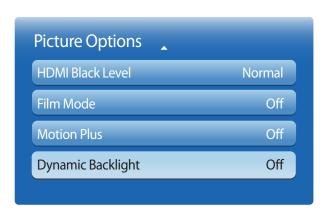
**Smooth**: Sets **Motion Plus** to **Smooth** (suitable for viewing moving images naturally) mode.

**Custom**: Use to reduce the afterimage and judder as much as you want.

**Demo**: Demonstrates **Motion Plus** (the picture will be displayed on the left half of the screen when **Motion Plus** is set to **On**).

- Blur Reduction : Use to reduce the afterimage as much as you want.
  - This is only supported if the **Motion Plus** is set to **Custom**.
- **Judder Reduction**: Use to reduce the judder as much as you want.
  - This is only supported if the **Motion Plus** is set to **Custom**.
- Reset: Restore Motion Plus settings to default values.
  - The colour on screen may vary with this option unintentionally.
  - Disabled when PIP is set to On.

<sup>-</sup> The displayed image may differ depending on the model.



## **Reset Picture**

 $\mathsf{MENU} \longrightarrow \mathsf{Picture} \to \mathsf{Reset} \, \mathsf{Picture} \to \mathsf{ENTER} \, \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

## **Dynamic Backlight**

Automatically adjust the backlight to provide the best possible screen contrast under the current conditions.

• Off / On

The **Dynamic Backlight** is not available when the input source is set to **PC**, **AV Component** while **Video Wall** is **On**.

Resets your current picture mode to its default settings.

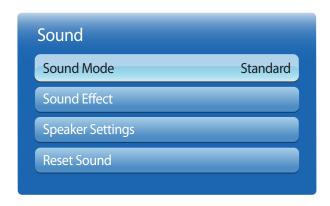
<sup>-</sup> The displayed image may differ depending on the model.

# Chapter 06 Sound Adjustment

Configure the sound (**Sound**) settings for the product.

## **Sound Mode**

MENUⅢ → Sound → Sound Mode → ENTER 🗗



- The displayed image may differ depending on the model.

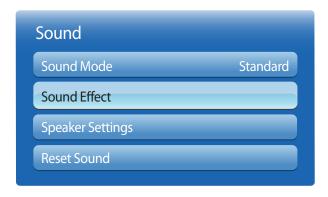
You can select a sound mode to suit your personal preferences.

- Standard: Selects the normal sound mode.
- Music: Emphasizes music over voices.
- Movie: Provides the best sound for movies.
- **Clear Voice**: Emphasizes voices over other sounds.
- Amplify: Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

If **Speaker Select** is set to **External**, **Sound Mode** is disabled.

## **Sound Effect**

 $\mathsf{MENU} \longrightarrow \mathsf{Sound} \to \mathsf{Sound} \; \mathsf{Effect} \to \mathsf{ENTER} \; \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

Configure your preferred sound effect for output sound.

If **Speaker Select** is set to **External**, **Sound Effect** is disabled.

Available only when **Sound Mode** is set to **Standard**.

#### Virtual Surround (Off / On)

This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF(Head Related Transfer Function) technology.

#### • Dialog Clarity (Off / On)

This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

#### Equaliser

Use **Equaliser** to customize sound setting for each speaker.

- Balance L/R: Adjusts the balance between the right and left speaker.
- 100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.
- **Reset**: Resets the equalizer to its default settings.

## **Speaker Settings**

MENUⅢ → Sound → Speaker Settings → ENTER 🗗



<sup>-</sup> The displayed image may differ depending on the model.

#### Speaker Select (External / Internal)

If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the products speakers and the speakers attached to your audio receiver. If this occurs, set the product to **External**.

When you set **Speaker Select** to **External**, the products speakers are turned off.

You will hear sound through the external speakers only. When the **Speaker Select** is set to **Internal**, both the product speakers and the external speakers are on. You will hear sound through both.

If there is no video signal, both the products speakers and the external speakers will be mute.

#### Auto Volume (Off / Normal / Night)

The volume can vary depending on the channel.

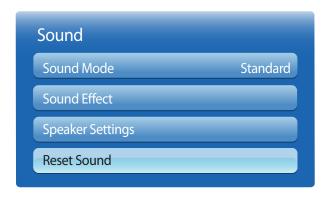
Automatically equalize the volume level when switching to another channel.

- Normal equalizes the volume level on each channel, so that when you change channels, the volume level is the same
- Night equalizes and decrease the volume level on each channel, so each channel is quieter. Night is useful at night, when you may want to keep the volume low.

To use the volume control of a connected source device, set **Auto Volume** to **Off**. A change to the volume control of the connected source device may not be applied if **Auto Volume** is set to **Normal** or **Night**.

## **Reset Sound**

 $\mathsf{MENU} \longrightarrow \mathsf{Sound} \to \mathsf{Reset} \, \mathsf{Sound} \to \mathsf{ENTER} \, \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

Reset all sound settings to the factory defaults.

# Chapter 07 Network

## **Network Settings**

 $MENU \ \blacksquare \ \rightarrow \ Network \rightarrow \ Network \ Settings \rightarrow \ ENTER \ \blacksquare$ 

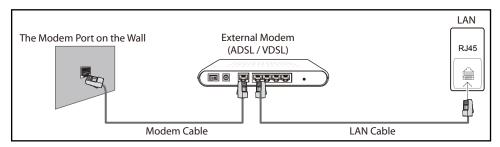


- The displayed image may differ depending on the model.

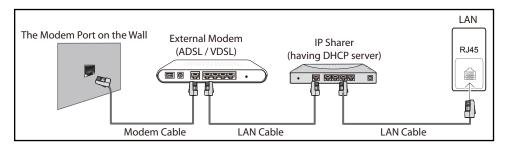
## **Connecting to a Wired Network**

There are three ways to attach your product to your LAN using cable.

 You can attach your product to your LAN by connecting the LAN port on the back of your product to an external modem using a LAN cable.
 See the diagram below.



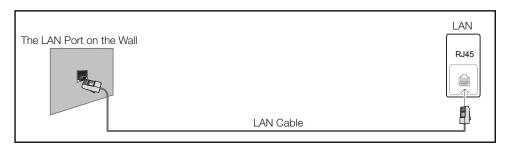
• You can attach your product to your LAN by connecting the LAN port on the back of your product to an IP Sharer which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



<sup>—</sup> Use Cat 7 cable for the connection.

Depending on how your network is configured, you may be able to attach your product to your LAN
by connecting the LAN port on the back of your product directly to a network wall outlet using a
LAN cable.

See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



If you have a Dynamic Network, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your product needs to access the Internet so you do not have to enter them manually. Most home networks are Dynamic Networks.

Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your product Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP).

If you have a Windows computer, you can also get these values through your computer.

- You can use ADSL modems that support DHCP if your network requires a Static IP address.
- ADSL modems that support DHCP also let you use Static IP addresses.

## **Wired Network Settings**

Set the network connection to use Internet services such as perform software upgrades.

#### **Automatic Network Settings**

Connect to the network using a LAN cable.

Make sure a LAN cable is connected first.

#### How to set up automatically

- **1** Go to the **Network Settings** screen. Select **Start**, press **♂**, and then press **♂** again.
- 2 The network test screen appears and verifies the network connection.

When the connection has been verified, the "Wired network and Internet connection completed." message appears.

- If the connection process fails, check the LAN port connection.
- If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section, network setup.

#### **Manual Network Settings**

Offices may use static IP addresses.

If this is the case, ask the network administrator for the IP address, subnet mask, gateway and DNS server address. Enter these values manually.

#### **Getting the Network Connection Values**

To view the Network connection values on most Windows computers, follow these steps.

- 1 Right click the Network icon on the bottom right of the screen.
- 2 In the pop-up menu that appears, click Status.

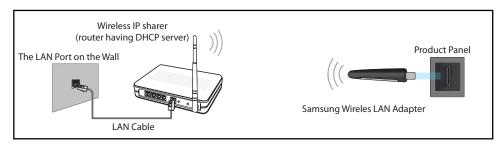
- 3 On the dialog that appears, click the **Support** tab.
- 4 On the **Support** Tab, click the **Details** button. The Network connection values are displayed.

#### How to set up manually

- **1** Go to the **Network Settings** screen. Select **Start**, press **♂**, and then press **♂** again.
- 2 The network test screen appears and the verification process starts. Press **Stop**. The verification process stops.
- 3 Select IP Settings on network connection screen. The IP Settings screen appears.
- 4 Select the field at the top, press , and then set IP Settings to Enter manually. Repeat the entry process for each field in the IP Address.
  - Setting IP Settings to Enter manually automatically changes DNS setting to Enter manually.
- 5 When done, select **OK** at the bottom of the page, and then press **♣**. The network test screen appears and the verification process starts.
- When the connection has been verified, the "Wired network and Internet connection completed." message appears.

## **Connecting to a Wireless Network**

To connect your product to your network wireless, you need a wireless router or modem and a Samsung Wireless LAN adapter (WIS10ABGN, WIS12ABGNX), which you connect to your product back or side panel USB port. See the illustration below.



Samsung's Wireless LAN adapter is sold separately and is offered by selected retailers, Ecommerce sites, and Samsungparts.com. Samsung's Wireless LAN adapter supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not play smoothly.

- You must use the "Samsung Wireless LAN adapter" (WIS10ABGN, WIS12ABGNX) to use a wireless network.
  - The Samsung Wireless LAN Adapter and the USB extension Cable are sold separately and are offered by select retailers, Ecommerce sites, and Samsungparts.com.
- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- Your product supports only the following wireless network security protocols.

  If you select the Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP, TKIP or TKIP AES (WPS2Mixed) on your AP or wireless router, Samsung products will not support a connection in compliance with new Wi-Fi certification specifications.
- If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.

- If your router, modem, or device is not certified, it may not connect to the product via the "Samsung Wireless LAN adapter".
- Ensure the product is turned on before you connect the "Samsung Wireless LAN adapter".
- Connection Methods: You can setup the wireless network connection in three ways.

  Auto Setup (Using the Auto Network Search function), Manual Setup, **WPS(PBC)**
- The product may not recognize the "Samsung Wireless LAN adapter" if you connect it to the product with a USB hub or USB extension cable other than the cable supplied with the product.

## Wireless Network Setting

#### **Automatic Network Setup**

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or **Security Key**. The **Security Key** is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up security for your wireless network. If you use this method of setting up the network connection, and have a **Security Key** for your wireless network, you will have to enter the Pass Phrase during the the automatic or manual setup process.

#### How to set up automatically

- 1 Go to the **Network Settings** screen. Select **Start**, press **.....**
- 2 The **Network** function searches for available wireless networks. When done, it displays a list of the available networks.
- In the list of networks, press the ▲ or ▼ button to select a network, and then press the ◄ button twice.
  - If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct **Network Name** and **Security Key** to establish the connection.

- 4 If the Enter security key. screen appears, go to step 5. If you select a wireless router that does not have security, go to step 7.
- If the router has security, enter the **Security Key** (**Security Key** or **PIN**).
- When done, use the right arrow button to move the cursor to **Next**, and then press **.** The network connection screen appears and the verification process starts.

A connection with the router is established, but the Internet cannot be accessed.

7 When the connection has been verified, the "Your wireless network and Internet connection are setup and ready to use." message appears.

#### **Manual Network Setup**

Offices may use static IP addresses.

If this is the case, ask the network administrator for the IP address, subnet mask, gateway and DNS server address. Enter these values manually.

#### **Getting the Network Connection Values**

To view the Network connection values on most Windows computers, follow these steps.

- Right click the Network icon on the bottom right of the screen.
- 2 In the pop-up menu that appears, click Status.
- 3 On the dialog that appears, click the **Support** tab.
- 4 On the **Support** Tab, click the **Details** button. The Network connection values are displayed.

#### How to set up manually

- 1 Go to the **Network Settings** screen. Select **Start**, press **-**
- 2 The Network function searches for available wireless networks. When done, it displays a list of the available networks
- 3 In the list of networks, press the ▲ or ▼ button to select a network, and then press the ◄ button twice.
  - If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct **Network Name** and **Security Key** to establish the connection.
- 4 If the Enter security key. screen appears, go to step 5. If you select a wireless router that does not have security, go to step 7.
- 5 If the router has security, enter the **Security Key** (**Security Key** or **PIN**).
- 6 When done, use the right arrow button to move the cursor to **Next**, and then press **◄**. The network connection screen appears and the verification process starts.
- 7 Select **Stop** while network connections are being attempted. This will stop the connection.
- 8 Select IP Settings on network connection screen. The IP Settings screen appears.
- 9 Select the field at the top, press , and then set IP Settings to Enter manually. Repeat the entry process for each field in the IP Address.
  - Setting IP Settings to Enter manually automatically changes DNS setting to Enter manually.

- **10** When done, select **OK** at the bottom of the page, and then press **3**. The network test screen appears and the verification process starts.
- 11 When the connection has been verified, the "Your wireless network and Internet connection are setup and ready to use." message appears.

#### WPS(PBC)

#### How to set up using WPS(PBC)

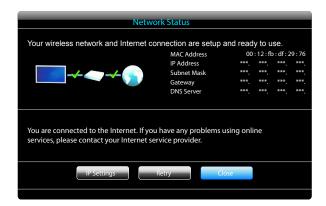
If your router has a WPS(PBC) button, follow these steps.

- 1 Go to **Network Settings** screen.
- 2 Select WPS(PBC), press , and then press again.
- Press the WPS(PBC) button on your router within 2 minutes. Your product automatically acquires all the network setting values it needs and connects to your network.
- 4 The network connection screen appears, and network setup is done.

## **Network Status**

MENU Ⅲ → Network → Network Status → ENTER 🕞

You can check the current network and Internet status.



The displayed image may differ depending on the model.

## Wi-Fi Direct

MENU Ⅲ → Network → Wi-Fi Direct → ENTER 🕞

Set to connect the product to wireless mobile devices. Using this function, you can connect wireless mobile devices with your product directly without a router.

To use this function, your mobile device should be supported by the **Wi-Fi Direct**.

# To connect your mobile device with your product using Wi-Fi Direct, follow these steps:

- 1 Go to Wi-Fi Direct screen. The product starts to search devices.
- 2 Turn on the Wi-Fi Direct function on your device. Select the desired Wi-Fi device.
- PBC (Push Button Configuration): Press the WPS(PBC) button on your Wi-Fi device within 2 minutes.
   Your product automatically acquires all the network setting values it needs and connects to your network.
- PIN: Input the displayed PIN on your device.

If you want to disconnect the device, select the connected Wi-Fi device, and then select **Disconnected**.

## **Soft AP**

#### 

Using this function, you can connect the product on your mobile devices if your mobile devices do not support **Wi-Fi Direct**. Set the options for connection of Wi-Fi device.

#### Soft AP

Turns on or off the **Soft AP**. When **Soft AP** is set to **On**, your mobile devices can find the product name in Wi-Fi connection list.

#### Security Key

Set the **Security Key** manually using the remote control.

- **B** Show security key: Shows the security key. Whether to show the security key is represented by a checkbox at the top.
- A Del.: Deletes the entered security key one digit at a time.
- Space: Inserts a blank space between characters when entering the security key.
- Return: Returns to the screen before entering the security key.
- The **Security Key** should consist of more than 8 digits.
- Input the generated security key into the device you want to connect.
- If network does not operate normally, check the security key again. An incorrect security key may cause a malfunction.

## **AllShare Settings**

#### $\mathsf{MENU} \coprod \to \mathsf{Network} \to \mathsf{AllShare} \, \mathsf{Settings} \to \mathsf{ENTER} \, \, \blacksquare$

Shows a list of mobile phones or connected devices which have been set up to use the **AllShare Play** function with this product.

- Allow / Deny: Allows/Blocks the devices.
- Delete from the list: Deletes the devices from the list.
  - This function only deletes the name of the device from the list. If the deleted device is turned on or tries to connect to the product, it may appear on the list again.

#### **Using the AllShare Play Function**

An alarm window appears informing you that media contents (videos, photos, music) sent from a mobile phone will be displayed on your product. The contents are played automatically 3 seconds after the alarm window appears. If you press the **RETURN** or **EXIT** button when the alarm window appears, the media contents are not played.

- The first time a device accesses your product through the media function, a warning popup window appears. Press the dutton to select **Allow**. This permits the phone to access the product freely and use the **AllShare Play** function to play content.
- To turn off media contents transmissions from a mobile phone, set **Deny** in the **AllShare Settings**.
- Contents may not play on your product depending on their resolution and format.
- The ☑ and ◀/▶ buttons may not work depending on the type of media content.
- Using the mobile device, you can control the **AllShare Play**. For details, refer to each mobile's user's guide.

## **Device Name**

MENU Ⅲ → Network → Device Name → ENTER 🔫

Select or enter a device name.

This name can be shown on network remote controls over the network.

# Chapter 08 System

## **Multi Control**





## **Configuring settings for Multi Control**

ID Setup

Assign an ID to a set. (Range: 0~99)

Press ▲ or ▼ to select a number, and press 🗗.

ID Input

Enter the ID number of the product connected to the input cable for input signal reception. Enter the number you want using the number buttons on the remote control.

MDC Connection

Select a method to connect to MDC to receive the MDC signal.

- RS232C MDC: Communicate with MDC via the RS232C-stereo cable.
- **RJ45 MDC**: Communicate with MDC via the RJ45 cable.

<sup>-</sup> The displayed image may differ depending on the model.

## Time

 $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{Time} \to \mathsf{ENTER} \; \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

You can configure **Clock Set** or **Sleep Timer**. You can also set the product to automatically turn on or off at a specified time using the **Timer** function.

#### **Clock Set**

Set the clock to use the various various timer features of the product.

Clock Set

Set the **Date** and **Time**.

Select Clock Set. Select Date or Time, and then press 🗗.

Use the number buttons to enter numbers or press the up and down arrow buttons. Use the left and right arrow buttons to move from one entry field to the next. Press when done.

You can set the **Date** and **Time** directly by pressing the number buttons on the remote control.

## **Sleep Timer**

Automatically shuts off the product after a preset period of time.

(Off / 30 min / 60 min / 90 min / 120 min / 150 min / 180 min)

Use the up and down arrows to select a period of time, and then press . To cancel **Sleep Timer**, select **Off**.



<sup>-</sup> The displayed image may differ depending on the model.

#### **On Timer**

Set **On Timer** so that your product turns on automatically at a time and on a day of your choosing.

The power is turned on with the specified volume or input source.

On Timer: Set the on timer by making a selection from one of the seven options. Ensure you set the current time first.

(On Timer1 ~ On Timer7)

You must set the clock before you can use **On Timer**.

- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want On Timer to turn on your product.
  - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.
- Volume: Set the desired volume level. Use the left and right arrow buttons to change the volume level.
- Source: Select the input source of your choice.
- Music / Photo (when the Source is set to USB): Select a folder in the USB device containing music or photo files you want played when the product turns on automatically.
  - This function is available only when a USB device is connected.
- If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.
- If there is only one photo file in the USB, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected.
- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- We recommend that you use a USB memory stick and a multi card reader when using **On Timer**. The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because the product can take too long to recognize these devices.



<sup>-</sup> The displayed image may differ depending on the model.

#### **Off Timer**

Set the off timer (Off Timer) by making a selection from one of the seven options. (Off Timer1 ~ Off Timer7)

You must set the clock before you can use **Off Timer**.

- Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want Off Timer to turn off your product.
  - The check mark indicates days you've selected.
- Time: Set the hour and minute. Use the number buttons or the up and down arrow keys to enter numbers. Use the left and right arrow buttons to change entry fields.

## **Holiday Management**

**Timer** will be disabled during a period specified as a holiday.

- Add: Specify the period you want to add as a holiday.
   Select the start and end dates of the holiday you want to add using the ▲/▼ buttons, and click the Save button.
   The period will be added to the list of holidays.
  - **Start**: Set the start date of the holiday.
  - **End**: Set the end date of the holiday.
  - Delete: Delete all items from the list of holidays.
     Select Delete. The message "Delete all holidays?" will appear.
     Select Yes. All holidays will be deleted.
- Apply: Set the On Timer and Off Timer to not activate on public holidays.
  - Press 🗗 to select the **On Timer** and **Off Timer** settings you do not want to activate.
  - The selected **On Timer** and **Off Timer** will not activate.

## Menu Language

 $\mathsf{MENU} {\color{red} \coprod} \to \mathsf{System} \to \mathsf{Menu} \ \mathsf{Language} \to \mathsf{ENTER} \ {\color{red} \blacksquare}$ 



<sup>-</sup> The displayed image may differ depending on the model.

#### Set the menu language.

A change to the language setting will only be applied to the onscreen menu display. It will not be applied to other functions on your PC.

## **Rotate menu**

 $\mathsf{MENU} \boxplus \to \mathsf{System} \to \mathsf{Rotate} \ \mathsf{menu} \to \mathsf{ENTER} \ \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

Configure the menu screen.

- Landscape: Display the menu in landscape mode (default).
- Portrait: Display the menu in portrait mode on the right side of the product screen.

— Available in **PC/DVI/HDMI/MagicInfo** mode.

## **Eco Solution**

MENUⅢ → System → Eco Solution → ENTER 🗗



<sup>-</sup> The displayed image may differ depending on the model.

## **Energy Saving**

Reduce the power consumption by adjusting the screen brightness.

Selecting **Picture Off** switches off the screen. The volume is not disabled.

To switch the screen on, press any button other than the volume button.

Off / Low / Medium / High / Picture Off

#### **Eco Sensor**

To enhance your power savings, the picture settings will automatically adapt to the light in the room.

Off / On

Adjusting the **Backlight** setting under **Picture** while **Eco Sensor** is on will disable the **Off**.

#### Min. Backlight

When **Eco Sensor** is **On**, you can manually adjust the minimum screen brightness. **Min. Backlight** is the darkest backlight mode. Make sure the **Min. Backlight** setting is lower than the **Backlight** setting.

If **Eco Sensor** is **On**, the display brightness may change (become slightly darker or brighter) depending on the surrounding light intensity.

## **No Signal Power Off**

Save power by turning the device off when no signal is received from any source.

- Off / 15 min / 30 min / 60 min.
- Disabled when an attached PC is in power saving mode.
- This product is set to **15 min** by default.
- The product will automatically power off at a specified time. The time can be changed as required.

#### **Auto Power Off**

The product will automatically turn off if you don't press a button on the remote or touch a button on product front panel within 4 hours to prevent overheating.

Off / On

## **Security**

MENUⅢ → System → Security → ENTER 🚭



<sup>-</sup> The displayed image may differ depending on the model.

Every time you access the **Security** functions, the PIN screen will appear and the default PIN number is "0-0-0-0" (default password: 0 - 0 - 0 - 0).

## **Safety Lock**

It sets safe lock function.

Off / On

All the menus and buttons of the product and remote control, except for the **LOCK** button on the remote control, will be locked by the **Safety Lock** function.

To unlock the menus and buttons, press the **LOCK** button and then enter the password (default password: 0 - 0 - 0 - 0.).

#### **Button Lock**

This menu can be used to lock the buttons on the product.

Only the remote control can control the product if **Button Lock** is set to **On**.

• Off / On

## **Change PIN**

The Change PIN screen will appear.

Choose any 4 digits for your PIN and enter it in **Enter New PIN**. Reenter the same 4 digits in **Confirm New PIN**.

When the Confirm screen disappears, press the **Close** button. The product has memorised your new PIN.

## PIP

#### $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{PIP} \to \mathsf{ENTER} \, \blacksquare$



- The displayed image may differ depending on the model.
- For **PIP** sound, refer to the **Sound Select** instructions.
- If you turn the product off while watching in the PIP mode, PIP mode will remain after power Off/On.
- You may notice that the picture in the PIP screen becomes slightly unnatural when you use the main screen to view a game or karaoke.

#### **PIP Settings**

The picture from the external video source will be in the main screen and the picture from the product will be in the PIP sub-picture screen.

Main picture	Sub picture	
PC	AV	
AV	PC, DVI, HDMI	
HDMI, DVI,	AV	
MagicInfo Lite PC, DVI, AV, Component, HDMI		

- PIP (Off / On): Activate or deactivate the PIP function.
- **Source**: You can select a source of the sub picture.
- Size ( , , , , , , , , , ): Select a size for the subpicture.
- Position ( ): Select a position for the sub-picture.
  - In ( , , , , , mode, you cannot select **Position**.
- Sound Select (Main / Sub): You can choose to listen to the sound from the Main picture or the Sub picture.

## **Auto Protection Time**

 $\mathsf{MENU} {\color{red} \coprod} \to \mathsf{System} \to \mathsf{Auto} \ \mathsf{Protection} \ \mathsf{Time} \to \mathsf{ENTER} \ {\color{red} \blacksquare}$ 



<sup>-</sup> The displayed image may differ depending on the model.

If the screen displays a still image for a certain period of time you define, the product activates the screen saver to prevent the formation of burnt in ghost images on the screen.

• Off / 2 hours / 4 hours / 8 hours / 10 hours

## **Screen Burn Protection**

MENUⅢ → System → Screen Burn Protection → ENTER 🗗



<sup>-</sup> The displayed image may differ depending on the model.

To reduce the possibility of screen burn, this unit is equipped with **Pixel Shift** screen burn prevention technology.

Pixel Shift moves the picture slightly on the screen.

The Pixel Shift Time setting allows you to programme the time between movements of the picture in minutes.

#### **Pixel Shift**

Minimize image retention by finely moving pixels horizontally or vertically.

- Pixel Shift (Off / On)
- Horizontal, Vertical and Time are enabled only when Pixel Shift is set to On.
- Horizontal: Sets how many pixels the screen moves horizontally.
- **Vertical**: Sets how many pixels the screen moves vertically.
- **Time**: Set the time interval for performing the horizontal or vertical movement, respectively.

#### **Available Pixel Shift Settings and Optimum Settings.**

	<b>Available Settings</b>	<b>Optimum Settings</b>	
Horizontal (pixels)	0~4	4	
Vertical (pixels)	0~4	4	
Time (minute)	1 min∼4 min	4 min	

The **Pixel Shift** value may differ depending on the product size (inches) and mode.

Displaying a still image or a **4:3** output for an extended period of time may cause image retention. This is not a defect in the product.

This function is not available in the **Screen Fit** mode.



<sup>-</sup> The displayed image may differ depending on the model.

#### **Timer**

You can set the timer for **Screen Burn Protection**.

The Pixel Shift feature stops automatically after a specified period of time.

#### **Timer**

- Of
- Repeat: Display the image retention-preventive pattern set in Mode at specified time intervals(Period).
- Interval: Display the image retention-preventive pattern set in **Mode** for a specified period of time (from **Start Time** to **End Time**).
  - The option is enabled only when **Clock Set** is configured.
  - Mode, Period, Time, Start Time and End Time are enabled only when Timer is set to Repeat or Interval.
- Mode: Select a screen protective pattern to display.
  - **Pixel**: Pixels on the screen alternate black continuously.
  - Rolling bar: A vertical bar moves left to right.
  - **Fading screen**: The entire screen becomes brighter, then darker.
- The **Rolling bar** and **Fading screen** patterns appear only once regardless of the specified repeat period or time.
- Period: Specify the time interval to activate the Screen Burn Protection function.
  - The option is enabled when **Repeat** is selected for **Timer**.
- **Time**: Specify the duration to keep the **Screen Burn Protection** function on.
  - The option is enabled when **Pixel** is selected for **Mode**.
- **Start Time**: Set the start time to activate the screen protection function.
  - The option is enabled when **Interval** is selected for **Timer**.
- End Time: Set the end time to deactivate the screen protection function.
  - The option is enabled when **Interval** is selected for **Timer**.



<sup>-</sup> The displayed image may differ depending on the model.

## Immediate display

Select the screen saver you want to display immediately.

• Off / Pixel / Rolling bar / Fading screen

## Side Grey

When the screen is set to 4:3 aspect ratio, adjust the brightness of white margins on sides to protect the screen.

• Off / Light / Dark

## **Ticker**

 $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{Ticker} \to \mathsf{ENTER} \; \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

Input text while a video or image is displayed and display the text on the screen.

- Off / On
  - Message, Time, Position, Motion, and Font options are enabled only when Ticker is set to On.
- Message: Enter a message to display on the screen.
- Time: Set the Start Time and End Time to display a Message.
- Position: Select an orientation to display a Message from Horizontal and Vertical.
  - Horizontal (Left / Centre / Right)
  - Vertical (Top / Middle / Bottom)
- Motion: Specify the Direction and Speed to display a Message.
  - Motion (Off / On)
  - Direction (Left / Right / Top / Bottom)
  - Speed (Slow / Normal / Fast)
  - Direction and Speed are enabled only when Motion is set to On.
- Font options: Specify the message Size and Font Colour.

## **Video Wall**

MENUⅢ → System → Video Wall → ENTER 🚭



- The displayed image may differ depending on the model.
- The Video Wall option is only enabled when PIP is set to Off.
- If more than four displays are connected horizontally and vertically, it is recommended that you use an input resolution of XGA (1024 x 768) level or higher to prevent a dark picture due to degradation in the contrast or colour intensity.

Customize the layout of multiple displays that are connected to form a video wall.

In addition, display part of a whole picture or repeat the same picture on each of the connected multiple displays.

To display multiple images, refer to MDC Help or the **MagicInfo** user guide. Some models may not support the MagicInfo function.

#### Video Wall

You can activate or deactivate Video Wall.

To organize a video wall, select **On**.

#### **Format**

Select a format to display images on multiple displays.

- Full: Display images in full screen.
- Natural: Display images at the original resolution without enlarging or reducing.

The **Format** option is only enabled when **Video Wall** is set to **On**.

#### Horizontal

This function automatically divides the screen according to the specified number of horizontal displays.

Enter the number of horizontally arranged displays.

The horizontal screen will automatically be divided according to the number entered.

A maximum of 15 displays can be assigned to the horizontal arrangement.

- The screen can be divided into a maximum of 100 screens (horizontal and vertical screens multiplied). For example, if the horizontal arrangement is set to 15, a maximum of 6 displays can be assigned to the vertical arrangement. Conversely, if the vertical arrangement is set to 15, a maximum of 6 displays can be assigned to the horizontal arrangement.
- The Horizontal option is only enabled when Video Wall is set to On.



<sup>-</sup> The displayed image may differ depending on the model.

#### **Vertical**

This function automatically divides the screen according to the specified number of vertical displays.

Enter the number of vertically arranged displays.

The vertical screen will automatically be divided according to the number entered.

A maximum of 15 displays can be assigned to the vertical arrangement.

The screen can be divided into a maximum of 100 screens (horizontal and vertical screens multiplied). For example, if the horizontal arrangement is set to 15, a maximum of 6 displays can be assigned to the vertical arrangement. Conversely, if the vertical arrangement is set to 15, a maximum of 6 displays can be assigned to the horizontal arrangement.

The **Vertical** option is only enabled when **Video Wall** is set to **On**.

#### **Screen Position**

You can customize the arrangement of split screens by moving displays identified with a number using the **Screen Position** function.

Select **Screen Position** to display the arrangement of displays (identified with a number) specified according to the **Horizontal** or **Vertical** settings. To customize the arrangement, move a number (display) using the direction buttons on the remote control and press **3**.

A maximum of 100 displays can be arranged in **Screen Position**.

The **Screen Position** option is only enabled when **Video Wall** is set to **On**.

The **Screen Position** window is only displayed when **Horizontal** and **Vertical** are configured.

## **Source AutoSwitch Settings**

MENUⅢ → System → Source AutoSwitch Settings → ENTER 🗗



<sup>-</sup> The displayed image may differ depending on the model.

Turning on the display with **Source AutoSwitch On**, and the previous video source selection is not active, the display will automatically search the different video input sources for active video.

#### Source AutoSwitch

When the Source AutoSwitch is On, the display video source will automatically be searched for active video.

The Primary Source selection will be activated, if the current video source is not recognized.

**Secondary Source** selection will become active, if no primary video source is available.

If both the primary and secondary input sources are not recognized, the display will perform two searches for an active source, each search checking the primary and then secondary source. If both searches fail, the display will return to the first video source and display a message indicating that there is no signal.

When the **Primary Source** selection is set to **All**, the display will search all the video source inputs twice in sequence looking for an active video source, returning back to the first video source in the sequence if no video is found.

## **Primary Source Recovery**

Select whether to restore the selected primary input source when a primary input source is connected.

The **Primary Source Recovery** function is disabled if **Primary Source** is set to **All**.

#### **Primary Source**

Specify **Primary Source** for the automatic input source.

## **Secondary Source**

Specify **Secondary Source** for the automatic input source.

## **General**

 $\mathsf{MENU} \coprod \to \mathsf{System} \to \mathsf{General} \to \mathsf{ENTER} \; \blacksquare$ 



<sup>-</sup> The displayed image may differ depending on the model.

## **Max. Power Saving**

Turns off the product to reduce power consumption after the PC has been left idle for a specified period of time.

Off / On

Available only **PC**, **DVI**, **HDMI** mode.

#### **Game Mode**

When connecting to a game console such as PlayStation<sup> $\mathbb{M}$ </sup> or Xbox<sup> $\mathbb{M}$ </sup>, you can enjoy a more realistic gaming experience by selecting game mode.

• Off / On

Precautions and limitations for **Game Mode** 

To disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.

Game Mode is not available when the input source is set to PC, DVI.

If Game Mode is On

Picture Mode is set to Standard and Sound Mode is set to Movie.

#### **BD** Wise

Provides the optimal picture quality for Samsung DVD, Blu-ray and Home Theatre products which support **BD Wise**. When **BD Wise** is turned **On**, the picture mode is automatically changed to the optimal resolution.

Off / On

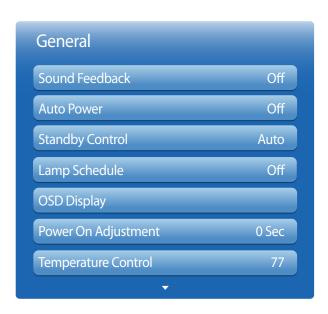
Available when you connect Samsung products that support **BD Wise** through an HDMI cable to the product.

The BD Wise function is enabled only when a source device with the BD Wise function is connected.

## **Menu Transparency**

Adjust transparency of menu box.

High / Medium / Low



<sup>-</sup> The displayed image may differ depending on the model.

#### **Sound Feedback**

Your product gives sound feedback when you use product.

**Sound Feedback** is enabled by default. Turn off **Sound Feedback** or adjust its volume.

This function is enabled by default. The volume can be adjusted or muted.

Off / Low / Medium / High

#### **Auto Power**

Enabling this option will automatically power on the product if the power cable is connected.

• Off / On

## **Standby Control**

You can set the screen standby mode to be applied when an input signal is received.

Auto

Power-saving mode will activate if no input signals are detected even though a source device is connected to the display. The message **No Signal** will appear if no source device is connected.

— Available in **PC / DVI** mode.

On

Power-saving mode will activate if no input signals are detected.

Off

The message No Signal will appear if no input signals are detected.

The **Standby Control** option is only enabled when **Source** is set to **PC**, **DVI**.

If **No Signal** is displayed although a source device is connected, check the cable connection.



<sup>-</sup> The displayed image may differ depending on the model.

## **Lamp Schedule**

Enables the lamp value to be adjusted to a user-specified value at a specified time in MDC mode.

Off / On

## **OSD Display**

Displays or hides a menu item on the screen.

— Source OSD / No Signal OSD / MDC OSD

## **Power On Adjustment**

You can set the warm-up time for the screen to turn on after the power button is pressed. (Range: 0 – 50 seconds)

A warm-up time that is too short may damage the product due to overvoltage.

## **Temperature Control**

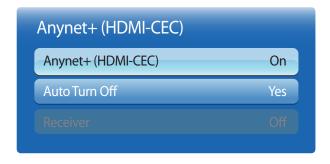
This function detects the internal temperature of the product. You can specify the temperature range that is acceptable. The default temperature is set to 77°C.

The recommended operating temperature for this product is 75 to 80°C (based on an ambient temperature of 40°C).

The screen will become darker if the current temperature exceeds the specified temperature limit. If the temperature continues to rise, the product will power off to prevent overheating.

## Anynet+ (HDMI-CEC)

 $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{Anynet+} \ (\mathsf{HDMI-CEC}) \to \mathsf{ENTER} \ \blacksquare$ 



- The displayed image may differ depending on the model.
- The **Anynet+** functions do not operate with other manufacturers' products.
- For instructions explaining how to connect Anynet+ external devices, refer to the device's user manual.
- You can connect only one receiver (home Theatre).

## Anynet+ (HDMI-CEC)

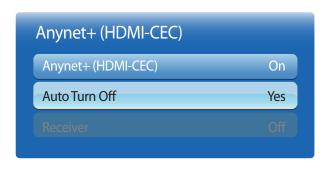
Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung product remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

- You can only control **Anynet+** devices using the product remote control, not the buttons on the product.
- The product remote control may not work under certain conditions. If this occurs, reselect the **Anynet+** device.
- **Anynet+** works when the AV device supporting **Anynet+** is in the standby or on status.
- While in **PIP** mode, **Anynet+** functions only when an AV device is connected as the primary display. It does not work if the AV device is connected as a secondary display.
- Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

#### **Anynet+ Menu**

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the product.

Anynet+ Menu	Description	
View PC	Changes <b>Anynet+</b> mode to <b>PC</b> mode.	
Device List	Shows the Anynet+ device list.	
(device_name) <b>MENU</b>	Shows the menu of the connected device menus. E.g. if a DVD player is connected, the disc menu of the DVD player will appear.	
(device_name) Tools	Shows the tools menu of the connected device. E.g. if a DVD player is connected, the tools menu of the DVD player will appear.	
	Depending on the device, this menu may not be available.	
(device_name) Title Menu	Shows the title menu of the disc in the connected device. E.g. If a DVD player is connected, the title menu of the movie in the DVD player will appear.	
	Depending on the device, this menu may not be available.	



<sup>-</sup> The displayed image may differ depending on the model.

#### **Auto Turn Off**

Setting an **Anynet+** Device to turn **Off** automatically when the product is turned off.

- No / Yes
- If **Auto Turn Off** is set to **Yes**, running external devices will turn off at the same time as the product powers off.
- May not be enabled depending on the device.

#### **Switching between Anynet+ Devices**

- 1 Press the **TOOLS** button, select **Anynet+** (**HDMI-CEC**), and then press
- 2 Select **Device List**, and then press the **4** button.
  - If you cannot find a device you want, select **Refresh** to refresh the list.
- 3 Select a device, and then press the 🕒 button. You can switch to the selected device.
- The **Device List** menu appears only when you set **Anynet+ (HDMI-CEC)** to **On** in the **System** menu.
- Switching to the selected device may take up to 2 minutes. You cannot cancel the switching operation while switching is in progress.
- If you have selected an Anynet+ device by pressing the **SOURCE** button and then selecting its input source, you cannot use the Anynet+ function.
- Make sure to switch to an **Anynet+** device by using the **Device List**.

## Troubleshooting for Anynet+

Problem	Possible Solution
Anynet+ does not work.	Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only.
	Check if the Anynet+ device power cord is properly connected.
	Check the Anynet+ device's Video/Audio/HDMI cable connections.
	Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+setup menu.
	Check whether the remote control is Anynet+ compatible.
	Anynet+ doesn't work in certain situations. (initial setup)
	• If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your product off and on again.
	Check if the Anynet+ function of the Anynet device is set on.
I want to start Anynet+.	<ul> <li>Check if the Anynet+ device is properly connected to the product and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu.</li> </ul>
	• Press the <b>TOOLS</b> button to display the <b>Anynet+</b> menu and select a menu you want.
I want to exit Anynet+.	Select View PC in the Anynet+ menu.
	• Press the <b>SOURCE</b> button on the product remote control and select a non- Anynet+ device.
The message "Disconnecting Anynet+ device" appears on the screen.	You cannot use the remote control when you are configuring Anynet+ or switching to a view mode.
	• Use the remote control after the product has completed Anynet+ configuration or has finished switching to Anynet+.
The Anynet+ device does not play.	You cannot use the play function when initial setup is in progress.

Problem	Possible Solution
The connected device is not displayed.	Check whether or not the device supports Anynet+ functions.
	Check whether or not the HDMI cable is properly connected.
	<ul> <li>Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu.</li> </ul>
	Search Anynet+ devices again.
	• Anynet+ requires an HDMI connection. Make sure the device is connected to your product with an HDMI cable.
	Some HDMI cables may not support Anynet+ functions.
	• If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.

## **DivX® Video On Demand**

 $\mathsf{MENU} \boxplus \to \mathsf{System} \to \mathsf{DivX} @ \ \mathsf{Video} \ \mathsf{On} \ \mathsf{Demand} \to \mathsf{ENTER} \ \blacksquare$ 



- The displayed image may differ depending on the model.

Shows the registration code authorized for the product.

If you connect to the DivX® web site and register using that code, you can download the VOD registration file. For more information about DivX® VOD, visit "http://vod.divx.com".

## **Play Mode**

 $\mathsf{MENU} \boxplus \to \mathsf{System} \to \mathsf{Play} \, \mathsf{Mode} \to \mathsf{ENTER} \, \boxdot$ 



<sup>-</sup> The displayed image may differ depending on the model.

Select Play Mode.

Changing Play Mode will change the functions in Contents Home.

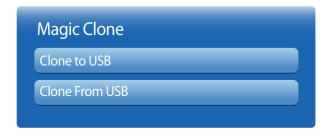
MagicInfo Lite / MagicInfo Premium S / MagicInfo Videowall S

— Changing **Play Mode** will automatically reboot the product and apply changes.

— Changing **Play Mode** will reset all the previous settings configured in **Play Mode**.

## **Magic Clone**

MENUⅢ → System → Magic Clone → ENTER 🕞



- The displayed image may differ depending on the model.

Export the product settings to a USB device or load the settings via a USB device.

This option is useful when assigning the same settings to several products.

- Clone to USB: Copy the product settings to a USB device.
- Clone From USB: Assign the settings saved in a USB device to the product.
  - After configuration is complete, the product is rebooted automatically.
  - The option may not work properly if the USB device contains a file other than a settings file.
  - Confirm that the USB device functions properly before running the option.
  - The option is available for products with the same **Model Code** and **Software Version**.

    Go to **Support** → **Contact Samsung** and find the product **Model Code** and **Software Version**.

## **Reset System**

 $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{Reset} \, \mathsf{System} \to \mathsf{ENTER} \, \blacksquare$ 

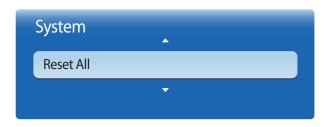


- The displayed image may differ depending on the model.

This option returns the current settings under system to the default factory settings.

## **Reset All**

 $\mathsf{MENU} \longrightarrow \mathsf{System} \to \mathsf{Reset} \; \mathsf{All} \to \mathsf{ENTER} \; \blacksquare$ 



- The displayed image may differ depending on the model.

This option returns all the current settings for a display to the default factory settings.

## PC module power

MENUⅢ → System → PC module power → ENTER 🗗



- The displayed image may differ depending on the model.

- PC module: Refers to network boxes or PIM.

The PC module can be turned on/off separately from the LFD.

## Synced power-on

To turn on the PC module without turning on the LFD, select Off.

• Off / On

## Synced power-off

To turn off the LFD without turning off the PC module, select **Off**.

Off / On

# Chapter 09 Support

- **Current Version**: This is the software

version already installed in the product.

## **Software Update**

 $\mathsf{MENU} \longrightarrow \mathsf{Support} \rightarrow \mathsf{Software} \ \mathsf{Update} \rightarrow \mathsf{ENTER} \ \blacksquare$ 

The **Software Update** menu lets you upgrade your product software to the latest version.

Be careful not to turn off the power until the upgrade is complete. The product will turn off and on automatically after completing the software upgrade.

When you upgrade software, all video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

## By USB

- 1 Visit http://www.samsunglfd.com
- 2 Download the latest USB software upgrade exe archive to your computer.
- **3** Extracts the exe archive to your computer. You should have a single folder with the same name as the exe file.
- 4 Copy the folder to a USB flash drive.
- 5 Turn on the product, and then insert the USB flash drive into the USB port of the product.
- 6 In the product menu, go to Support → Software Update.
- 7 Select By USB.

Please be careful not to remove the USB drive until the upgrade is complete.

# **Contact Samsung**

 $\mathsf{MENU} \longrightarrow \mathsf{Support} \to \mathsf{Contact} \ \mathsf{Samsung} \to \mathsf{ENTER} \ \blacksquare$ 

View this information when your product does not work properly or when you want to upgrade the software.

You can find information regarding our call Centres and how to download products and software.

— Contact Samsung and find the product Model Code and Software Version.

# **Contents Home**

MENUⅢ → Support → Contents Home → ENTER 🕞



<sup>-</sup> The displayed image may differ depending on the model.

# **MagicInfo Lite**

 $\mathsf{MENU} \hspace{.1cm} \underline{\hspace{.1cm}} \hspace{.1cm} \to \mathsf{Support} \to \mathsf{Contents} \hspace{.1cm} \mathsf{Home} \to \mathsf{MagicInfo} \hspace{.1cm} \mathsf{Lite} \to \mathsf{ENTER} \hspace{.1cm} \blacksquare$ 

MagicInfo Lite can also be accessed by pressing MagicInfo Lite/S on the remote control.

To launch MagicInfo Lite, select MagicInfo Lite for the Play Mode on the System.

MagicInfo Lite player allows you to play content (image, video, document files) at a desired time.

You can play content saved in Internal memory or USB memory. You can also play content via **MagicInfo Lite Server** after connecting to a network.

Refer to page 164 for details about the **MagicInfo Lite** menu.

# **MagicInfo Premium S**

MENU  $\coprod \rightarrow$  Support  $\rightarrow$  Contents Home  $\rightarrow$  MagicInfo Premium S  $\rightarrow$  ENTER  $\blacksquare$ 

MagicInfo Premium S can also be accessed by pressing MagicInfo Lite/S on the remote control.

To launch MagicInfo Premium S, select MagicInfo Premium S for the Play Mode on the System.

A licence needs to be purchased to use MagicInfo Premium S.

MagicInfo Premium S Player can be used to edit and play content files including templates such as images, videos and documents.

Play content files and templates from USB memory or built-in memory. Alternatively, play content files and templates via **MagicInfo Premium Server** over a network.

Refer to page 187 for details about the MagicInfo Premium S menu.

# MagicInfo Videowall S

 $MENU \ \blacksquare \ \rightarrow \ Support \rightarrow \ Contents \ Home \rightarrow \ MagicInfo \ Videowall \ S \rightarrow \ ENTER \ \blacksquare$ 

MagicInfo Videowall S can also be accessed by pressing MagicInfo Lite/S on the remote control.

To launch MagicInfo Videowall S, select MagicInfo Videowall S for the Play Mode on the System.

A licence needs to be purchased to use MagicInfo Videowall S.

**MagicInfo Videowall S Player** allows you to play content at a desired time. Content that can be played includes VideoWall content created in **MagicInfo VideoWall Author** in addition to other image and video files.

Content can be played only through **VideoWall Console** over a network.

Refer to page 214 for details about the **MagicInfo Videowall S** menu.

# **AllShare Play**

 $MENU \ \blacksquare \ \rightarrow Support \rightarrow Contents \ Home \rightarrow All Share \ Play \rightarrow ENTER \ \blacksquare$ 

Enjoy videos, photos, music files saved on a USB Mass Storage Class (MSC) device.

Refer to page 148 for details about the **AllShare Play** menu.

#### Source

- The input source can also be changed

by using the **SOURCE** button on the

remote control.

 $\mathsf{MENU} \longrightarrow \mathsf{Support} \to \mathsf{Contents} \ \mathsf{Home} \to \mathsf{Source} \to \mathsf{ENTER} \ \blacksquare$ 

You can display the screen of a source device connected to the product. Select a source from **Source** list to display the screen of the selected source.

#### **Edit Name**

MENUIII  $\rightarrow$  Support  $\rightarrow$  Contents Home  $\rightarrow$  Source  $\rightarrow$  TOOLS  $\rightarrow$  Edit Name  $\rightarrow$  ENTER  $\blacksquare$ 

Sometimes the screen will not display properly unless the name of a source device is specified in Edit Name.

In addition, it is best to rename the source device in **Edit Name** to obtain optimal picture quality.

The list can include the following source devices. **Source** devices on the list differ depending on the selected source.

VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI Devices / TV / IPTV / Blu-ray / HD DVD / DMA

Available settings in the Picture menu depend on the current source and settings made in Edit Name.

- When connecting a PC to the HDMI terminal, set Edit Name to PC. In other cases, set Edit Name to AV devices.
- When connecting a PC to the **HDMI IN** port with HDMI cable, you should set the product to **PC** mode under **Edit Name**.
- When connecting a PC to the HDMI IN port with HDMI to DVI cable, you should set the product to DVI PC mode under Edit Name.
- When connecting an AV devices to the HDMI IN port with HDMI to DVI cable, you should set the product to DVI Devices mode under Edit Name.

#### Information

MENUⅢ → Support → Contents Home → Source → TOOLS → Information → ENTER 🕞

You can see detailed information about the selected external device.

<sup>147</sup> 

# Chapter 10 AllShare Play

Enjoy videos, photos, music files saved on a USB Mass Storage Class (MSC) device

**AllShare Play** can also be accessed by pressing **CONTENET(HOME)** on the remote control.

# What is AllShare Play?

Play photo, video or music files saved on a storage device. Wirelessly connect a smartphone to a PC using a wireless network.

Play various content using one of the following methods in **AllShare Play**:

- Using internal memory and a USB device: Play video, photo and music files from a USB device. Copy the files to the internal memory.
- Connecting to a PC over a network: Play photo, video and music files saved on a PC through a network connection.

# Read the following before using AllShare Play with a USB device

#### **Caution**

- Before connecting a USB device to the product, back up files to ensure your data is not damaged or lost. Samsung Electronics is not liable for any damage or loss of data.
- Do not remove a USB device while it is loading.
- If a USB device is connected using a USB extension cable, the USB device may not be recognized or files saved on the device may not be able to be read.
- If the product does not recognize a connected USB device, the files on the USB device may be corrupted or may not be able to be played. If this occurs, connect the USB device to the PC to format the device, then make sure the device is connected properly.
- USB HDD greater than 2TB is not supported.

#### **Compatible devices with AllShare Play**

- Some types of USB devices, digital cameras and audio devices may not be compatible with the product.
- AllShare Play is only compatible with USB MSC devices.
- MSC device refers to a Mass Storage Class Bulk-Only Transport device. Examples of MSC devices include Thumb drives, Flash card readers and USB HDDs. (USB hubs are not supported.)
  - These MSC devices must be connected directly to a USB port on the product.
- If more than one Picture Transfer Protocol (PTP) device is connected, only one will work at a time.
- If multiple MSC devices are connected, some devices may not be recognized. USB devices that require high power (higher than 500mA or 5V) may not be supported.
- If an overheating warning message appears when a USB device is connected or used, the USB device may not be recognized or function properly.
- The screensaver activates if the product is left idle for a period of time specified in Auto Protection Time.
- · Power-saving mode on some external hard disk drives may automatically deactivate after connecting to the product.

#### File system and formats

- AllShare Play may not function properly with unlicenced multimedia files.
- Media Transfer Protocol (MTP) is not supported.
- Supported file systems include FAT16, FAT32 and NTFS (read only).
- **AllShare Play** supports the sequential JPEG format. It does not support the progressive JPEG format.
- Images with a higher resolution take longer to be displayed on the screen.
- The maximum JPEG resolution supported is 15360x8640 pixels.
- If a file is incompatible or corrupted, a message **Not Supported File Format.** appears.
- When sorting files in folder view mode, a maximum of 1000 files can be displayed in each folder.
- If a USB device contains 8000 files and folders or more, some files and folders may not open.
- DRM MP3 files downloaded from websites that charge a fee cannot be played.

  Digital Rights Management (DRM) refers to a system for protecting the copyrights of data circulated via the Internet or other digital media by enabling secure distribution and/or disabling illegal distribution of the data.

# Using a USB device

#### **Connecting a USB device**

- 1 Turn on your product.
- 2 Connect a USB device containing photo, music and/or movie files to the USB port on the back or side panel of the product.
- 3 A message New device connected. appears when the USB device is connected properly. Select type of content to play from Videos, Photos, and Music.

— If only one USB device is connected, files saved on the USB device are displayed automatically.

#### Removing a USB device

#### Removing a USB device from Source

1 Press **SOURCE** on the remote control. Alternatively, go to **Source** using the OSD menu.

 $\mathsf{MENU} \boxplus \to \mathsf{Support} \to \mathsf{Contents} \ \mathsf{Home} \to \mathsf{Source} \to \mathsf{ENTER} \ \blacksquare$ 

- 2 Select a USB device and press **TOOLS** on the remote control. **Tools** option appears.
- 3 Select Safely Remove USB Device and wait until the USB device is disconnected. The USB device is disconnected.

#### **Deleting AllShare Play from the screen**

1 Go to the AllShare Play page.

MENUⅢ → Support → Contents Home → AllShare Play → ENTER 🗗

- 2 Select all options except My list and press 🗗 on the remote control.
- 3 Select a USB device and press **TOOLS** on the remote control. **Tools** option appears.
- 4 Select Safely Remove USB Device and wait until the USB device is disconnected. The USB device is disconnected.

It is recommended to remove a USB device using the **Safely Remove USB Device** function.

It is recommended to use a USB HDD that

has a power adapter.

To view content saved on a USB device, connect the USB device to a USB port on the product.

# Connecting to a PC over a network

Play photo, video and music files saved on a PC through a network connection in AllShare Play mode.

- For details on how to configure a network, refer to the section **Network Settings**.
- To view content saved on the PC, connect the product and PC to the same wireless router and visit http://www.samsung.com to download the AllShare PC software.
- Ensure the product and PC are connected to the same network subnet.
  - All IP addresses are made up of four parts separated by dots.

(E.g. IP address 111.222.333.444) The product should have the same IP address as the PC, except for the fourth part of the address, if they are connected to the same subnet. (E.g. 111.222.333.\*\*\*)

When connected to a PC over a network, AllShare Play does not support the following features.

- Background Music On and Background Music Setting features
- DivX® DRM is not supported.
- Make sure you set the Windows firewall programme to permit the AllShare PC software.
- When using AllShare Play mode through a network connection, available functions may vary depending on the server as follows:
  - Available sorting modes may vary.
  - The **Scene Search** function may not be supported.
  - The resume function may not be available for multiple users.
     (The function only remembers the point where the most recent user stopped playing a video.)
  - The search function may not work depending on the content information.
- You may experience file stuttering while playing video content over a network connection.

# **Using the AllShare Play features**

If you connect the product and a source device such as a cell phone or PC to the same network, you can play media content saved on the device such as videos, photos and music.

Visit http://www.samsung.com or contact the Samsung Electronics Customer Centre for more information.

Additional software may need to be installed on your mobile device.

Refer to the mobile device user manual for details.

Connect your Samsung display product to a network through **AllShare Play** and use the special features provided by Samsung as follows:

- Playback of various video formats (DivX, MP4, 3GPP, AVI, ASF, MKV, etc.)
- Video thumbnail feature
- Bookmark feature (to resume video playback)
- Auto-chaptering (scene search)
- Digital Content Management
- Compatibility with various subtitle formats (SRT, SMI, SUB, TXT, TTXT)
- Search with file names
- And many others

<sup>—</sup> A compatibility issue may occur if a video file is played when a server not provided by Samsung Electronics is connected.

To use **AllShare Play**, go to http://www.samsung.com and download the AllShare software.

# Using the Basic AllShare Play Features

 $MENU \blacksquare \hspace{1cm} \rightarrow \textcolor{red}{\textbf{Support}} \rightarrow \textcolor{red}{\textbf{Contents Home}} \rightarrow \textcolor{red}{\textbf{AllShare Play}} \rightarrow \textcolor{red}{\textbf{ENTER}} \blacksquare$ 



The displayed image may differ depending on the model.

# Sorting the file lists

To sort files, press **D** on the remote control to specify the sorting criteria.

Sort Criteria	Operation	Videos	Photos Music		
Folder view	Displays the whole folder. You can view the file name and thumbnail by selecting the folder.	✓	~	<b>✓</b>	
Title	Sorts and displays the file title in Symbol/Number/ Alphabet/Special order.	✓	<b>✓</b>	<b>√</b>	
Latest Date	Sorts and shows files by the latest date.	<b>✓</b>	<b>✓</b>		
Earliest Date	Sorts and shows files by the earliest date.	<b>✓</b>	✓		
Monthly	Sorts and shows photo files by month.		✓		
Artist	Sorts the music file by artist in alphabetical order.			<b>✓</b>	
Album	Sorts the music file by album in alphabetical order.			<b>✓</b>	
Genre	Sorts music files by the Genre.			<b>✓</b>	

# **Playing Selected Files**

- 1 Select files from the list of **Videos**, **Photos**, or **Music** files.
- 2 Press **TOOLS** on the remote control and select **Play selection**.
  - The option does not appear if a folder is highlighted by the cursor.
- 3 Select files and press Play.
  - ✓ appears for selected files.
  - To select all the files in the current folder, press **Select All**.
  - To deselect all the files, press **Deselect All**.

# **Copying Files**

- 1 Select files from the list of **Videos**, **Photos**, or **Music** files.
- 2 Select a storage device.
- Internal Memory: Copy files from Internal Memory to a USB Device memory device.
- USB Device: Copy files from a USB Device memory device to Internal Memory.
- 3 Press **TOOLS** on the remote control and select **Send**.

The option does not appear if a folder is highlighted by the cursor.

- 4 Select files and press **Send**.
  - ✓ appears for selected files.
  - To select all the files in the current folder, press **Select All**.
  - To deselect all the files, press **Deselect All**.

# **Creating a Playlist**

- 1 Select files from the list of **Videos**, **Photos**, or **Music** files.
- 2 Press TOOLS on the remote control and select Add to Playlist.
  - The option does not appear if a folder is highlighted by the cursor.
- 3 Select files and press Add.

The Add to Playlist page appears.

- ✓ appears for selected files.
- To select all the files in the current folder, press **Select All**.
- To deselect all the files, press **Deselect All**.
- 4 Select Create new. The Create a new playlist.. page appears.
- 5 Enter a playlist name using the remote control and select **Done**.
- 6 A playlist is created.

To play the created playlist, select Play.

To return to the list of files, select **OK**.

7 A created **Playlist** is displayed in **My list**.

# My list

 $MENU \blacksquare \hspace{1cm} \rightarrow \textcolor{red}{Support} \rightarrow \textcolor{red}{Contents} \hspace{1cm} Home \rightarrow \textcolor{red}{AllShare} \hspace{1cm} Play \rightarrow \textcolor{red}{My} \hspace{1cm} list \rightarrow \textcolor{red}{ENTER} \hspace{1cm} \blacksquare$ 

Access desired content more conveniently and quickly.

To play files, select files or a **Playlist** and press **-**

- Recently played: Display video, photo or music files that were recently played. This mode is suitable when playing files again that were played before.
- What's new: Display new video, photo or music files that were uploaded to a PC or USB device. This mode is suitable when playing new files that were recently uploaded.
- Playlist: Display Playlist files saved on a PC or USB device. To play a Playlist, select the desired Playlist.

# My list options

Option Name	Operations	Recently played	What's new	Playlist	
Play	Play a selected file or <b>Playlist</b> .	<b>✓</b>	<b>✓</b>	<b>✓</b>	
Remove	Delete a selected file.	<b>✓</b>			
Delete	Delete a selected <b>Playlist</b> .			✓	
Edit playlist	Edit a selected <b>Playlist</b> .			✓	
Information	View information about a selected file or <b>Playlist</b> .	✓	✓	✓	

# **Videos**

MENUШ → Support → Contents Home → AllShare Play → Videos → ENTER 🗗

# Playing a Video

- 1 Select the internal memory or a USB device. Select files from the list of files.
- 2 Press the ☑ button or 🕨 (Play) button.
- The file name appears on the top with its playing time.
- If video time information is unknown, the playing time and progress bar are not displayed.
- During video playback, you can search using the ◀ and ▶ buttons.
- You can use the ◄(REW), ►(FF), II (Pause), ■(Stop), and ►(Play) buttons on the bottom of your remote during playback.

  ( ◀ 3 / ◀ 2 / ◀ 1 / ► 1 / ► 2 / ► 3)
- Press the **RETURN** button to exit the movie

#### **Using the Play Continuously Function (Resume Play)**

If you exit a movie when it is playing, you can play the movie later from the point where you stopped it.

- 1 Select a file from the list of files.
- Press the ▶(Play) or ⊀ button.
- 3 The Movie will begin to play from where you stopped it.
- Resume is only available when you resume playing a movie you had stopped.
- Press the 🕕 button for pause.

The Resume function does not support multiple users. (It will only memorise the point where the most recent user stopped playing.)

# **Photos**

 $MENU \longrightarrow Support \rightarrow Contents Home \rightarrow AllShare Play \rightarrow Photos \rightarrow ENTER \bigcirc$ 

# Viewing a Photo (or Slide Show)

- 1 Select the internal memory or a USB device. Select a file from the list of files.
- 2 Press the 🖼 button.
- To view files manually, one at a time, press the left or right arrow buttons.
- To start the slide show, press the ▶(Play) button when the file you selected is displayed.
- During the slide show, all files in the file list are displayed in order, starting from the file you selected.
  - If you select the wrong background music, you cannot change the music until the BGM (Background Music) has finished loading.
  - During a slide show, press the TOOLS button to access additional functions such as Go to Photos List, Stop Slide Show, Slide Show Speed, Slide Show Effect, Background Music On / Background Music Off, Background Music Setting, Picture Mode, Sound Mode, Zoom, Rotate and Information.
  - $\begin{tabular}{ll} \hline You can use the & \blacksquare \end{tabular} \begin{tabular}{ll} (Pause), & \blacksquare \end{tabular} \begin{tabular}{ll} (Play) buttons on the bottom of your remote during a slide show. \\ \hline \end{tabular}$
  - When you press the (Stop) or **RETURN** button, the slide show stops and the main photo screen re-appears.

# Music

 $\mathsf{MENUIII} \to \mathsf{Support} \to \mathsf{Contents} \ \mathsf{Home} \to \mathsf{AllShare} \ \mathsf{Play} \to \mathsf{Music} \to \mathsf{ENTER} \ \blacksquare$ 

# **Playing Music**

- 1 Select the internal memory or a USB device. Select files from the list of files.
- 2 Press the → button or (Play) button.
- When the music is playing, you can search using the ◄ (REW) and ▶ (FF) button.

If the sound is abnormal when you play MP3 files, adjust the **Equaliser** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)

# Videos / Photos / Music Play Option menu

When playing video or photo files, you can press the **TOOLS** button to display an Options menu.

Option Name	Operations	Videos Pho		Music
View	Sort music files grouped by <b>Folder view</b> , <b>Title</b> , <b>Artist</b> , <b>Album</b> or <b>Genre</b> .			<b>✓</b>
Play selection	Select and play files from a list of music files.			✓
Go to Videos List	Return to the list of video files.	<b>✓</b>		
Go to Photos List	Return to the list of photo files.		<b>✓</b>	
Go to Playlist	Go to <b>My list</b> .			✓
Play from the beginning	Play again the currently playing video from the beginning.	<b>✓</b>		
Scene Search	You can use the <b>Scene Search</b> function during playback to view or start a movie from the scene of your choice.	<b>✓</b>		
Title Search	You can move directly to another Title.	✓		
Time Search	You can search the movie using ◀ and ▶ buttons at intervals of 1 minute.	<b>✓</b>		
Repeat Mode	You can play movie and music files repeatedly.	✓		
Picture Size	You can adjust the picture size to your preference.	<b>✓</b>		
Picture Mode	You can change the <b>Picture Mode</b> .	<b>✓</b>	<b>✓</b>	

- Pressing the INFO button while a device name is selected will display information about the selected device.
- Pressing the INFO button while a file is selected will display information about the selected file.

Option Name	Operations	Videos	Photos	Music
Sound Mode	You can change the <b>Sound Mode</b> .	<b>✓</b>	<b>√</b>	
Audio Language	You can enjoy video in one of supported languages.	<b>✓</b>		
	The function is enabled only when you play stream-type files which support multiple audio formats.			
Subtitle	You can view a subtitle. You can select a specific language if the subtitle file contains multiple languages.	<b>✓</b>		
Subtitle Settings	Displays the <b>Subtitle Settings</b> . You can set up a subtitle option.	<b>✓</b>		
Start Slide Show / Stop Slide	You can start or stop a slide show.		<b>✓</b>	
Show	Alternatively, use the $lacksquare$ or $lacksquare$ button on the remote.			
Slide Show Speed	You can select the slide show speed during the slide show. Alternatively, use the ◀ or ▶ button on the remote.		✓	
Slide Show Effect	You can set various slide show effects.		<b>√</b>	
Background Music On / Background Music Off	You can start or stop background music.		<b>√</b>	
Background Music Setting	You can set and select background music when watching a photo file or slide show.		~	
Zoom	You can zoom into images in full screen mode.		<b>√</b>	
Rotate	You can rotate images.		✓	
Information	View file information.	<b>✓</b>	<b>✓</b>	<b>✓</b>

# **Supported Subtitle and AllShare Play file formats**

# Subtitle

External	Internal		
<ul><li>MPEG-4 timed text (.ttxt)</li><li>SAMI (.smi)</li></ul>	Xsub     Container: AVI		
<ul><li>SubRip (.srt)</li><li>SubViewer (.sub)</li></ul>	SubStation Alpha     Container: MKV		
<ul> <li>Micro DVD (.sub or .txt)</li> <li>SubStation Alpha (.ssa)</li> </ul>	Advanced SubStation Alpha     Container: MKV		
Advanced SubStation Alpha (.ass)	SubRip     Container: MKV		
Powerdivx (.psb)	MPEG-4 timed text     Container: MP4		

# **Supported image resolutions**

File Extension	Туре	Resolution	
*.jpg, *.jpeg	JPEG	15360 x 8640	
*.png	PNG	1920 x 1080	
*.bmp	ВМР	1920 x 1080	
*.mpo	MPO	15360 x 8640	

# Supported music file formats

File Extension	Туре	Codec	Comments
*.mp3	MPEG	MPEG1 Audio Layer 3	
*.m4a, *.mpa, *.aac, *.3ga	MPEG4	AAC	
*.flac	FLAC	FLAC	The Seek (jump) function is not supported.
			Supports up to 2 channel

# **Supported Video Formats**

- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- You may experience file stuttering while playing a video through a network connection.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Some USB/digital camera devices may not be compatible with the player.

Video Decoder	Audio Decoder			
Supports up to H.264, Level 4.1	Supports up to WMA 10 Pro 5.1 channel.			
$\rm H.264FMO$ / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.	WMA lossless audio is not supported.			
For all Video codecs except MVC, VP8, VP6:	QCELP, AMR NB/WB are not supported.			
• Below 1280 x 720: 60 frame max	If Vorbis is only in Webm container, supports up to 2 channel.			
• Above 1280 x 720: 30 frame max				
GMC 2 over is not supported.				
Supports only BD MVC Spec.				

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi	AVI	DIVX 3.11 / 4.x / 5.x / 6.x	1920 x 1080	6~30	30	AC3
*.mkv	MKV					LPCM
asf.	ASF					ADMPCM
·.wmv	MP4	MPEG4 SP / ASP				(IMA, MS)
f.mp4	3GP					AAC
.mov	VRO	H.264 BP / MP / HP				HE-AAC
<sup>4</sup> .3gp	VOB					WMA
·.vro	PS					DD+
f.mpg	TS	Motion JPEG				MPEG(MP3)
·.mpeg						DTS Core
*.ts		Window Media Video v9				G.711(ALaw,µ-Law)
*.tp						
t.trp						
·.mov		MPEG2				
f.flv						
·.vob		MPEG1				
·.svi		VD6	640, 400			
.m2ts		VP6	640 x 480		4	
.mts		MVC	1920 x 1080	24 / 25 / 30	40	
.divx		MIVC	1920 X 1080	24/25/30	40	
.webm	WebM	VP8		6 ~ 30	8	Vorbis

# **Chapter 11 MagicInfo Lite**

 To launch MagicInfo Lite, select
 MagicInfo Lite for the Play Mode on the System.

# File Formats Compatible with MagicInfo Lite player

# Read before using MagicInfo Lite player

- The file system supports FAT16, FAT32 and NTFS.
- A file with a vertical and horizontal resolution larger than the maximum resolution cannot be played.
   Check the vertical and horizontal resolution of the file.
- Check the supported video and audio Codec types and Versions.
- Check the supported file versions.
  - Flash version up to 10.1 is supported
  - PowerPoint version up to 97 2007 is supported
- Only the last USB device that was connected is recognized.

# Contents

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi	AVI	DIVX 3.11 / 4.x / 5.x / 6.x	1920 x 1080	6~30	30	AC3
*.mkv	MKV					LPCM
asf.	ASF	110501001100				AAC
.wmv	MP4	MPEG4 SP / ASP				HE-AAC
.mp4	3GP					WMA
.mov	VRO	H.264 BP / MP / HP				DD+
.3gp	VOB					MPEG(MP3)
vro	PS	AA .: IDEC				DTS Core
.mpg	TS	Motion JPEG				G.711(ALaw,µ-Law)
.mpeg						ου τις (Ξατιγμ Ξατιγ
.ts		Window Media Video v9				
.tp						
trp		MPEG2				
.flv		202				
.vob						
.svi		MPEG1				
.m2ts						
.mts		VP6	640 x 480		4	
.divx						

Video Audio Image

- 3D video is not supported.
- Content with a resolution larger than the resolution specified in the table above is not supported.
- Video content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy video during playback.
- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Some USB/digital camera devices may not be compatible with the player.
- Supports up to H.264, Level 4.1
- H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- For all Video codecs except MVC, VP8, VP6:
  - Below 1280 x 720: 60 frame max
  - Above 1280 x 720: 30 frame max
- GMC 2 or higher is not supported.
- Supports only BD MVC Spec.

- Audio content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy audio during playback.
- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Some USB/digital camera devices may not be compatible with the player.
- Supports up to WMA 10 Pro 5.1 channel. WMA lossless audio is not supported.
- QCELP, AMR NB/WB are not supported.

- Compatible image file format : Jpeg
- Supported maximum resolution: 15,360 x 8,640
- Supported image effects: 13 effects
  (Fade1, Fade2, Blind, Checker, Stairs, Linear,
  Wipe, Ripple Wash, Drop Wave, Pin Wheel,
  Random Blocks, Spin Fade In)

Flash Power Point

• Compatible with Flash 10.1

• Flash Animation

- Compatible file format : SWF

• Recommended resolution: 960 x 540

- Caution

Performance comparable to Flash Player on a Windows operating system cannot be guaranteed

Optimization is needed during content creation

Flash Video

- Compatible file format : FLV

- Video

Codec: H.264 BP

Resolution: 1920 x 1080

Audio

Codec: H.264 BP

Caution

F4V file format is not supported Screen Video is not supported • Compatible document file formats

- Extension : ppt, pptx

- Version : Office 97 ∼ Office 2007

Functions not supported

Animation effect

- 3D shapes (which will be displayed in 2D)

Header and footer (some subitems are not supported)

Word Art

- Align

A group alignment error may occur

- Office 2007

SmartArt is not fully supported. 97 out of 115 subitems are supported.

Object insertion

- Opening encrypted documents

 Vertical text some subitems are not supported

- Slide notes and handout

PDF WORD

• Compatible document file formats

- Extension : pdf

• Functions not supported

 Content less than 1 pixel not supported because of performance degradation issue.

- Masked Image, Tiled Image content not supported.

- Content with Rotated Text, not supported.

- 3D Shadow Effects not supported.

Compatible document file formats

Extension : .doc, .docx

Version : Office 97 ~ Office 2007

Functions not supported

Page background effect

- Some paragraph styles

Word Art

- Align

A group alignment error may occur

- 3D shapes (which will be displayed in 2D)

- Office 2007

SmartArt is not fully supported. 97 out of 115 subitems are supported.

Charts

Half-width characters

Letter spacing

Vertical text

some subitems are not supported

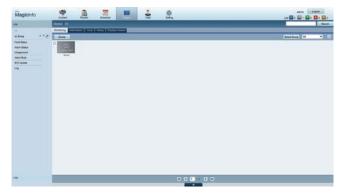
Slide notes and handout

# Approving a connected device from the server

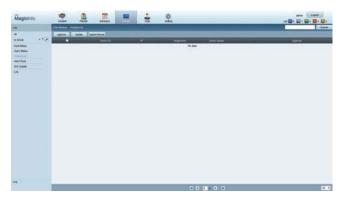
1 Access the server you have assigned to your device.



- 2 Enter your ID and password to log in.
- 3 Select **Device** from the top menu bar.

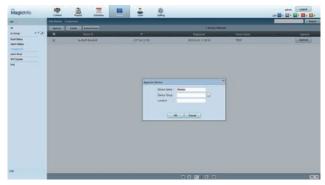


- 4 Select Lite from the menus on the left.
- 5 Select **Unapproved** from the sub-menus of **Lite**.



6 Select the **Approve** button for your device from the list of unapproved Lite devices.

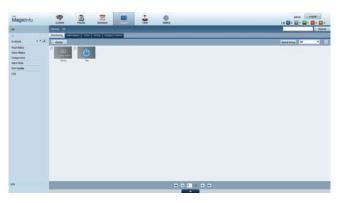
7 Enter the information required to approve the device.



- Device Name: Enter the device name.
- **Device Group**: Select \_\_\_\_ to specify the group.
- Location: Enter the current location of the device.

Pressing the **INFO** button on the remote when a network schedule is running will display the details of the schedule. Check that the correct device has been selected by viewing the device ID in the details.

8 Select the All menu to check that the device has been registered.

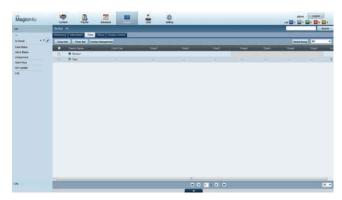


- **9** When the device is approved by the server, the schedule registered in the selected group will be downloaded to the device. The schedule will run after it is downloaded.
- For further details on how to configure a schedule, refer to the <MagicInfo Lite Server user's manual>.
- If a device is deleted from the list of devices approved by the server, the device will reboot to reset its settings.

#### Setting the current time

A schedule may not run if the time set on the device is different from the server's current time.

1 Go to the tabs **Device**  $\rightarrow$  **Time**.



- 2 Select your device.
- 3 Select **Clock Set**, and sync the time with the server.
- When connecting to the server for the first time, the time on the product is set using the GMT time of the region where the server is installed.
- The time on the product can be changed from the server as shown in step 3.
- Turning the product off and then on again will restore the time setting on the product to the last time that was set from the server.

For further details on how to manage the time (scheduling, holiday management, etc.), refer to the <MagicInfo Lite Server user's manual>.

# **MagicInfo Lite**

 $\mathsf{MENU} \longrightarrow \mathsf{Support} \rightarrow \mathsf{Contents} \ \mathsf{Home} \rightarrow \mathsf{MagicInfo} \ \mathsf{Lite} \rightarrow \mathsf{ENTER} \ \blacksquare$ 

To launch MagicInfo Lite, select MagicInfo Lite for the Play Mode on the System.

— Press the **MagicInfo Lite/S** button on the remote control.

# **MagicInfo Lite player**

#### **Network schedule**

You can view whether the server is connected (approval) in the **MagicInfo Lite** menu screen. To view whether the server is connected when a **Network schedule** is running, press **INFO** on the remote.

1 Select MagicInfo Lite player in the MagicInfo Lite menu.



2 Select Network schedule in the MagicInfo Lite player menu.



#### **Local schedule**



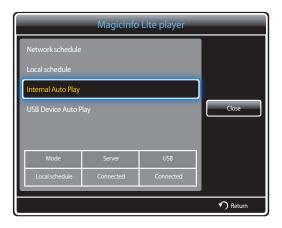
Go to **Local Schedule Manager** → Click **Create** to create a schedule → Select the schedule you want to run

1 Select **Local schedule** in the **MagicInfo Lite player** menu screen.

Run schedules created in Local Schedule Manager.

This menu is disabled if there was no schedule run previously in **Local Schedule Manager**.

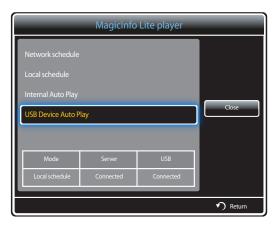
### **Internal Auto Play**



The option is enabled only when there is at least one content item, except for music files, in **Internal Memory**.

- Select Internal Auto Play in the MagicInfo Lite player menu screen.
- Play content, which has been copied to **Internal Memory**, in alphabetical order.

### **USB Device Auto Play**



- The option is enabled only when there is at least one content item, except for music files, in the "MagicInfoSlide" folder on USB Storage.
- Ensure a USB device is inserted. Be sure to create a folder named "MagicInfoSlide" in the USB device and put content in the folder.
- Select **USB Device Auto Play** in the **MagicInfo Lite player** menu screen.
- The content contained in the "MagicInfoSlide" folder on the USB device will play in alphabetical order.
- USB Device Auto Play will automatically run if USB memory is connected when Network schedule, Local schedule or Internal Auto Play is running.

# **Local Schedule Manager**

Configure the settings for playback from Local schedule.

Alternatively, select and play content from internal or USB memory according to the customized playback sequence.

#### **Registering a Local schedule**

Select **Local Schedule Manager** in the **MagicInfo Lite** menu screen.



2 Select Create in the Local Schedule Manager screen.



3 Select **Time** to set the time you want to play content.



- A maximum of 24 schedules can be created.
- If more than one schedule is created, the start time must be different for each schedule.
   (Example of an incorrect setting: 12:00 am 12:00 am 11:00 pm)
- Referring to the example shown below, if more than one Local schedule is assigned to a single time slot, schedule B is
  executed before schedule A.
- (E.g., **A**: 12:00 am 12:00 am / **B**: 01:00 pm 02:00 pm)

4 Select Contents to specify the content you want to play.



- A maximum of 99 content files can be selected.

#### 5 Select **Duration**



Specify the sequence and time duration to play content files.

- Changing the playing sequence Select a content file and change the sequence using the **Up** or **Down** button.
- Duration

Set the duration to play content.

- **Duration** cannot be specified for videos.
- Duration must be at least 5 seconds.

Press **Save** to save the settings.

6 Select Save. Select the memory space you want to save the content to.



7 Check that the schedule has been added to the Local Schedule Manager.



### **Modifying a Local schedule**

— Ensure at least one **Local schedule** is registered.

1 Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select the local schedule you want to modify.



#### 3 Select Edit.



4 Change the details of the local schedule. Next, select **Save**.

# **Deleting a Local schedule**

— Ensure at least one **Local schedule** is registered.

1 Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select the local schedule you want to delete.

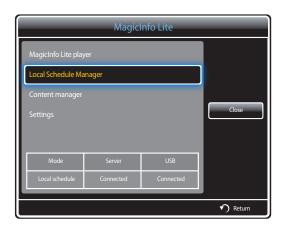


Next, select **Delete**.

### **Running a Local schedule**

— Ensure at least one **Local schedule** is registered.

1 Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select the local schedule you want to run. Next, select Run.



## **Stopping a Local schedule**

This function is enabled only when a schedule is running.

Selecting **Stop** will change the running mode from **Local schedule** to **Network schedule**.

1 Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select Stop.



# Viewing the details of a Local schedule

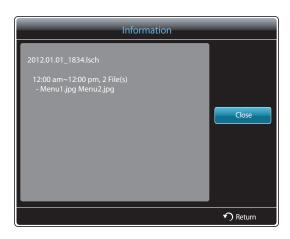
Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select the local schedule you want to view the details of.



3 The details of the schedule will be displayed.



# **Copying a Local schedule**

Select Local Schedule Manager in the MagicInfo Lite menu screen.



2 Select a storage device where the local schedule files to copy are saved.



- Internal Memory: Copy local schedules from Internal Memory to a USB memory device.
- **USB**: Copy local schedules from a USB memory device to **Internal Memory**.

3 Select local schedule files and press Copy.



4 A window appears asking if you want to copy the files to the **Internal Memory** or **USB** memory device. Select **Yes** to copy the files.

## **Content manager**

#### **Copying content**

Select **Content manager** in the **MagicInfo Lite** menu screen.



2 Select the content you want to copy.



- If content under **Internal Memory** is selected: You can copy the content under **Internal Memory** to **USB** memory.
- If content under USB is selected: You can copy the content under USB memory to Internal Memory.
  - Selecting content under **Internal Memory** and **USB** memory at the same time will disable copying.
- 3 Next, select Copy.

## **Deleting content**

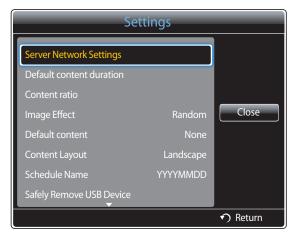
Select **Content manager** in the **MagicInfo Lite** menu screen.



- 2 Select the content you want to delete. Next, select **Delete**.
- Content under **Internal Memory** and **USB** memory can be deleted at the same time.



## Settings



<sup>-</sup> The displayed image may differ depending on the model.

## **Server Network Settings**

To run MagicInfo Lite, connect to a network.

#### Server

Enter the **MagicInfo Lite** server settings.

(E.g.: http://192.168.0.10:7001/MagicInfo/)

• If the SSL option is enabled, the server is configured to use https and data transfer is encrypted.

Enter the server IP address and port number. Use 7001 as the port number. (If unable to connect to the server using port number 7001, check with your server administrator to find the correct port number and then change the port number.)

#### FTP Mode

Specify the FTP operating mode.

Active / Passive

#### **Default Storage**

Specify the location you want to save content (downloaded from the server) to.

- Internal Memory: Save the content to the internal memory of the product.
- **USB**: Save the content to USB memory.

If a **Network Settings** is running when USB memory is not connected, the default content will run.

#### **Default content duration**

Specify the duration to play content.

 Image Viewer Time, Doc viewing time, PPT Viewer Time, PDF viewing time, Flash viewing time

The duration must be at least 5 seconds.

#### **Content Ratio**

Specify the display aspect ratio by type when playing content.

- Doc Ratio, PPT ratio, PDF ratio, Video ratio
  - Original: Display content with the original size.
  - Full Screen: Display content in full screen.

#### **Image Effect**

Configures the image transition effects.

 Fade1, Fade2, Blind, Spiral, Checker, Linear, Stairs, Wipe, Ripple Wash, Drop Wave, Pin Wheel, Random Blocks, Spin Fade In, Random, None

#### **Default content**

Specify the content to play by default when launching MagicInfo Lite.

• Content of up to 20MB is supported for **Default content**.

## **Content Layout**

Change the screen orientation to landscape or portrait view.

Landscape / Portrait

#### **Schedule Name**

Select a schedule title format when creating a local schedule.

YYYYMMDD / YYYYDDMM / DDMMYYYY

#### **Safely Remove USB Device**

Safely removes USB memory

#### **Delete all content**

Delete all the content files in **Internal Memory**.

#### **Reset Settings**

Restore all the values under **Settings** to the default when the product was purchased.

## When Content is Running

## Viewing the details of the content that is running

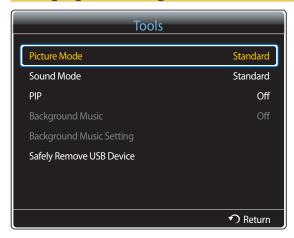


<sup>-</sup> The displayed image may differ depending on the model.

Press the **INFO** button on the remote control.

- **Software Version**: Displays the software version of a device
- Device Name: Displays the name of a device recognized by the server
- **Device ID**: Displays the original identification number of a device
- Mode: Displays the current operating mode
   (Network schedule, Local schedule, Internal Auto Play or USB Device Auto Play) of MagicInfo Lite player
- Server: Displays the connection status (Connected, Disconnected or Not approved) of the server
- **USB**: Displays the connection status of a USB device
- Schedule download: Displays the progress of a network schedule being downloaded from the server

### Changing the settings for the content that is running



<sup>-</sup> The displayed image may differ depending on the model.

Press the **TOOLS** button on the remote control.

You can change the **Picture Mode** or **Sound Mode** setting or safely remove a USB device (**Safely Remove USB Device**) while content is playing by pressing the **TOOLS** button on the remote control.

- Picture Mode (Dynamic / Standard / Natural / Movie)
   Customizes the screen settings for the content currently playing
- Sound Mode (Standard / Music / Movie / Clear Voice / Amplify)

  Customizes the audio settings for the content currently playing
- PIP (Off / On)
   Activate or deactivate the PIP function.
- Background Music (Off / On)
   Activate or deactivate the Background Music function.
- Background Music Setting (Shuffle / Play / Cancel / Deselect)
   Set music files saved in the Internal Memory as Background Music.

To enable the **Background Music Setting**, make sure at least one MP3 file is saved in **Internal Memory**.

 Safely Remove USB Device Safely removes USB memory

# Chapter 12 MagicInfo Premium S

 To launch MagicInfo Premium S, select MagicInfo Premium S for the Play Mode on the System. A Licence needs to be purchased to use MagicInfo Premium S.

To download the software, go to the Samsung homepage at http://www.samsunglfd.com.

To purchase a licence, contact a Customer Server Centre.

## File Formats Compatible with MagicInfo Premium S Player

## Read before using MagicInfo Premium S Player

- The file system supports FAT16, FAT32 and NTFS.
- A file with a vertical and horizontal resolution larger than the maximum resolution cannot be played. Check the vertical and horizontal resolution of the file.
- Check the supported video and audio Codec types and Versions.
- Check the supported file versions.
  - Flash version up to 10.1 is supported
  - PowerPoint version up to 97 2007 is supported
- Only the last USB device that was connected is recognized.

<sup>—</sup> See <u>page 165</u> for further details on supported codecs.

Video Audio **Image** • 3D video is not supported. • Compatible image file format : Jpeg • Audio content with a Bit rate or Frame rate larger than the rate specified in the table above • Content with a resolution larger than the Supported maximum resolution: 15,360 x 8,640 can cause choppy audio during playback. resolution specified in the table above is not Supported image effects: 8 effects supported. • Video content will not play, or not play (Fade1, Fade2, Blind, Checker, Stairs, Linear, correctly, if there is an error in the content or • Video content with a Bit rate or Frame rate larger Wipe, Ripple Wash) the container. than the rate specified in the table above can cause choppy video during playback. • Some USB/digital camera devices may not be compatible with the player. Video content will not play, or not play correctly, if there is an error in the content or the container. • Supports up to WMA 10 Pro 5.1 channel. WMA lossless audio is not supported. • Some USB/digital camera devices may not be compatible with the player. • QCELP, AMR NB/WB are not supported. • Supports up to H.264, Level 4.1 H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • For all Video codecs except MVC, VP8, VP6: Below 1280 x 720: 60 frame max

Above 1280 x 720: 30 frame max

GMC 2 or higher is not supported.Supports only BD MVC Spec.

Flash Power Point PDF

- Compatible with Flash 10.1
- Flash Animation
  - Compatible file format: SWF
- Recommended resolution: 960 x 540
  - Caution

Performance comparable to Flash Player on a Windows operating system cannot be guaranteed

Optimization is needed during content creation

- Flash Video
  - Compatible file format : FLV
  - Video

Codec: H.264 BP

Resolution: 1920 x 1080

- Audio

Codec: H.264 BP

Caution

F4V file format is not supported Screen Video is not supported

- Compatible document file formats
  - Extension : ppt, pptx
  - Version : Office 97 ~ Office 2007
- Functions not supported
  - Animation effect
  - 3D shapes (which will be displayed in 2D)
  - Header and footer (some subitems are not supported)
  - Word Art
  - Align

A group alignment error may occur

- Office 2007

SmartArt is not fully supported. 97 out of 115 subitems are supported.

- Object insertion
- Half-width characters
- Letter spacing
- Charts
- Vertical text some subitems are not supported
- Slide notes and handout

- Compatible document file formats
  - Extension : pdf
- Functions not supported
  - Content less than 1 pixel not supported because of performance degradation issue.
  - Masked Image, Tiled Image content not supported.
  - Content with Rotated Text, not supported.
  - 3D Shadow Effects not supported.
  - Some characters not supported
     (Special characters may be corrupted)

WORD	Template files	LFD
<ul> <li>Compatible document file formats</li> <li>Extension: .doc, .docx</li> <li>Version: Office 97 ~ Office 2007</li> </ul>	Creation/editing/playback are only available in Template Manager.	Supported in USB Device Auto Play and     Network schedule (Authored in a PC authoring tool for Premium S Player)
<ul> <li>Functions not supported</li> <li>Page background effect</li> <li>Some paragraph styles</li> <li>Word Art</li> <li>Align         <ul> <li>A group alignment error may occur</li> </ul> </li> <li>3D shapes (which will be displayed in 2D)</li> </ul>		Compatible document file formats     Extension : .lfd
<ul> <li>Office 2007</li> <li>SmartArt is not fully supported. 97 out of 115 subitems are supported.</li> <li>Charts</li> </ul>		
<ul> <li>Half-width characters</li> <li>Letter spacing</li> <li>Vertical text         some subitems are not supported</li> <li>Slide notes and handout</li> </ul>		

#### **Network Schedule Multiframe**

#### **Playback restrictions**

- A maximum of two video (Videos) files can be played.
- If PIP mode is enabled, more than one video (Videos) file cannot be played.
- More than one **Flash** file cannot be played.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- LFD(.lfd) files are not supported.

#### Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: Flash file > network BGM > local BGM > video file in the main frame selected by the user
  - Network BGM: Settings can be configured in step 1 when creating a server schedule.
  - Local BGM: BGM settings can be configured using the tools displayed after the TOOLS button is pressed during MagicInfo Premium S playback.
  - User-selected main frame: Main frame settings can be configured in step 2 when creating a server schedule.

#### Template files and LFD(.lfd) files

#### Restrictions

- Scenarios created in a PC authoring tool that were published to a USB device are not supported.
- Scenarios created in a PC authoring tool that were published along with schedule details to a USB device are not supported.
- Playback is only possible via USB Device Auto Play.
   An .lfd file must exist under the MagicInfoSlide folder on the USB device.

#### **Playback restrictions**

- A maximum of two video (Videos) files can be played.
- If PIP mode is enabled, more than one video (Videos) file cannot be played.
- More than one **Flash** file cannot be played.
- For Office files (PPT and Word files) and PDF files, only one file type is supported at a time.
- Multiple videos (Videos) cannot be played on a single display of a video wall simultaneously.
- More than one **PIP** content file cannot be played.

#### Sound output restrictions

- More than one sound output cannot be used.
- Playback priority: Flash file > network BGM > local BGM > video file in the main frame selected by the user
  - User-selected main frame: Sound output can be selected in step 3 while authoring in Template Manager

#### **Others**

#### Flash performance can be slower on a PC (H/W performance restrictions)

#### PIP function restrictions

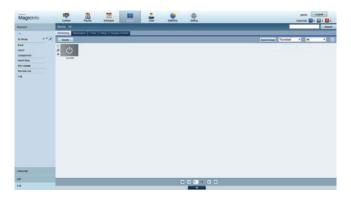
- PIP function is not available during Flash playback.
- Not supported if the content layout is **Portrait**. (Note that **PIP** is supported when configured in **Template Manager** and applied to an .lfd file.)
- PIP configured in Template Manager or applied to an .Ifd file and PIP configured on the product cannot be used simultaneously.
- **PIP** is always in **Landscape** mode if configured in **Template Manager** or applied to an .lfd file. (Note that the display cannot be rotated when the content layout is **Portrait**.)

# Approving a connected device from the server

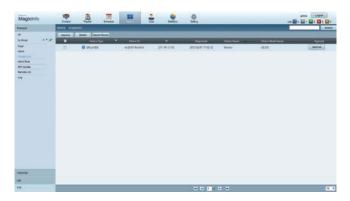
1 Access the server you have assigned to your device.



- 2 Enter your ID and password to log in.
- 3 Select **Device** from the top menu bar.

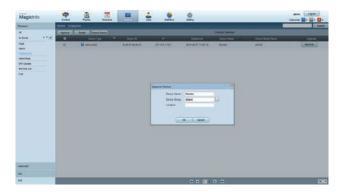


- 4 Select **Premium** from the menus on the left.
- 5 Select **Unapproved** from the sub-menus of **Premium**.



6 Select the **Approve** button for your device from the list of unapproved Premium devices.

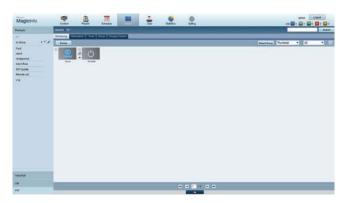
7 Enter the information required to approve the device.



- **Device Name**: Enter the device name.
- **Device Group**: Select \_\_\_\_ to specify the group.
- **Location**: Enter the current location of the device.

Pressing the **INFO** button on the remote when a network schedule is running will display the details of the schedule. Check that the correct device has been selected by viewing the device ID in the details.

8 Select the All menu to check that the device has been registered.

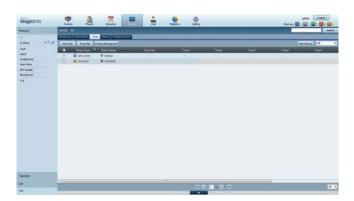


- **9** When the device is approved by the server, the schedule registered in the selected group will be downloaded to the device. The schedule will run after it is downloaded.
- For further details on how to configure a schedule, refer to the <MagicInfo Premium Server user's manual>.
- If a device is deleted from the list of devices approved by the server, the device will reboot to reset its settings.

#### Setting the current time

A schedule may not run if the time set on the device is different from the server's current time.

1 Go to the tabs **Device**  $\rightarrow$  **Time**.



- 2 Select your device.
- 3 Select Clock Set, and sync the time with the server.
- When connecting to the server for the first time, the time on the product is set using the GMT time of the region where the server is installed.
- $\bullet\ \ \,$  The time on the product can be changed from the server as shown in step 3.
- Turning the product off and then on again will restore the time setting on the product to the last time that was set from the server.

For further details on how to manage the time (scheduling, holiday management, etc.), refer to the <MagicInfo Premium Server user's manual>.

## **MagicInfo Premium S**

MENU  $\longrightarrow$  Support  $\rightarrow$  Contents Home  $\rightarrow$  MagicInfo Premium S  $\rightarrow$  ENTER  $\blacksquare$ 

- To launch MagicInfo Premium S, select MagicInfo Premium S for the Play Mode on the System.
- Press the MagicInfo Lite/S button on the remote control.

## MagicInfo Premium S Player

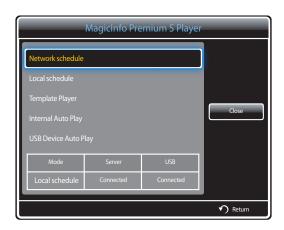
#### **Network schedule**

You can view whether the server is connected (approval) in the **MagicInfo Premium S** menu screen. To view whether the server is connected when a **Network schedule** is running, press **INFO** on the remote.

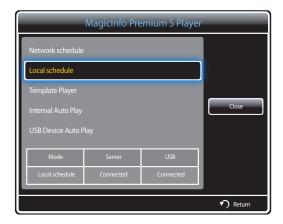
1 Select MagicInfo Premium S Player in the MagicInfo Premium S menu.



2 Select Network schedule in the MagicInfo Premium S Player menu.



#### **Local schedule**



Go to **Local Schedule Manager** → Click **Create** to create a schedule → Select the schedule you want to run

Select **Local schedule** in the **MagicInfo Premium S Player** menu screen.

Run schedules created in **Local Schedule Manager**.

This menu is disabled if there was no schedule run previously in **Local Schedule Manager**.

#### **Template Player**



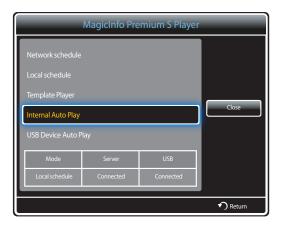
Go to **Template Manager**  $\rightarrow$  Click **Create** to create a template  $\rightarrow$  Select the template you want to run

Select **Template Player** in the **MagicInfo Premium S Player** menu screen.

Run templates created in **Template Manager**.

This menu is disabled if there was no schedule run previously in **Local Schedule Manager**.

## **Internal Auto Play**



#### **USB Device Auto Play**



- The option is enabled only when there is at least one content item, except for music files, in **Internal Memory**.
- 1 Select Internal Auto Play in the MagicInfo Premium S Player menu screen.
- Play content, which has been copied to **Internal Memory**, in alphabetical order.

- The option is enabled only when there is at least one content item, except for music files, in the "MagicInfoSlide" folder on USB Storage.
- Ensure a USB device is inserted. Be sure to create a folder named "MagicInfoSlide" in the USB device and put content in the folder.
- Select **USB Device Auto Play** in the **MagicInfo Premium S Player** menu screen.
- The content contained in the "MagicInfoSlide" folder on the USB device will play in alphabetical order.
- USB Device Auto Play will automatically run if USB memory is connected when Network schedule, Local schedule or Internal Auto Play is running.

## **Local Schedule Manager**

Configure the settings for playback from **Local schedule**.

Alternatively, select and play content from internal or USB memory according to the customized playback sequence.

#### **Registering a Local schedule**

Select Local Schedule Manager in the MagicInfo Premium S menu screen.



2 Select Create in the Local Schedule Manager screen.



3 Select Time to set the time you want to play content.



- A maximum of 24 schedules can be created.
- If more than one schedule is created, the start time must be different for each schedule.
   (Example of an incorrect setting: 12:00 am 12:00 am / 12:00 am 11:00 pm)
- Referring to the example shown below, if more than one Local schedule is assigned to a single time slot, schedule B is
  executed before schedule A.
- (E.g., **A**: 12:00 am 12:00 am / **B**: 01:00 pm 02:00 pm)

4 Select Contents to specify the content you want to play.



<sup>-</sup> A maximum of 99 content files can be selected.

#### 5 Select **Duration**



Specify the sequence and time duration to play content files.

- Changing the playing sequence Select a content file and change the sequence using the **Up** or **Down** button.
- Duration

Set the duration to play content.

- **Duration** cannot be specified for videos.
- Duration must be at least 5 seconds.

Press **Save** to save the settings.

6 Select Save. Select the memory space you want to save the content to.



7 Check that the schedule has been added to the Local Schedule Manager.



## **Modifying a Local schedule**

— Ensure at least one **Local schedule** is registered.

Select Local Schedule Manager in the MagicInfo Premium S menu screen.



2 Select the local schedule you want to modify.



#### 3 Select **Edit**.



4 Change the details of the local schedule. Next, select **Save**.

## **Deleting a Local schedule**

— Ensure at least one **Local schedule** is registered.

Select **Local Schedule Manager** in the **MagicInfo Premium S** menu screen.



2 Select the local schedule you want to delete.



Next, select **Delete**.

## **Running a Local schedule**

— Ensure at least one **Local schedule** is registered.

1 Select Local Schedule Manager in the MagicInfo Premium S menu screen.



2 Select the local schedule you want to run. Next, select Run.



## **Stopping a Local schedule**

This function is enabled only when a schedule is running.

Selecting **Stop** will change the running mode from **Local schedule** to **Network schedule**.

1 Select Local Schedule Manager in the MagicInfo Premium S menu screen.



2 Select Stop.



## Viewing the details of a Local schedule

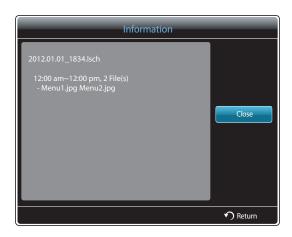
Select Local Schedule Manager in the MagicInfo Premium S menu screen.



2 Select the local schedule you want to view the details of.



3 The details of the schedule will be displayed.



## **Copying a Local schedule**

Select **Local Schedule Manager** in the **MagicInfo Premium S** menu screen.



2 Select a storage device where the local schedule files to copy are saved.



- Internal Memory: Copy local schedules from Internal Memory to a USB memory device.
- **USB**: Copy local schedules from a USB memory device to **Internal Memory**.

3 Select local schedule files and press Copy.

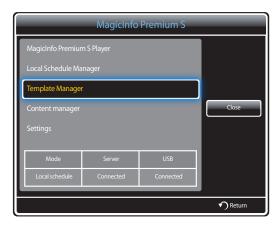


4 A window appears asking if you want to copy the files to the **Internal Memory** or **USB** memory device. Select **Yes** to copy the files.

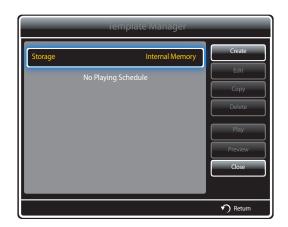
## **Template Manager**

## Registering a Template

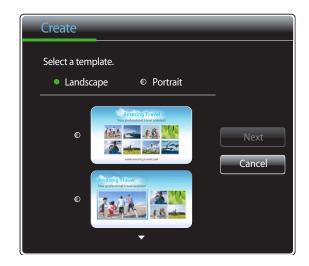
Select **Template Manager** in the **MagicInfo Premium S** menu screen.



2 Select **Create** in the **Template Manager** screen.



3 Select a template in **Landscape** or **Portrait** mode.



<sup>—</sup> Interlaced signal rotation is not supported.

4 Organize a template by inserting text, video, photo, or PDF files as desired.



- To load a file or manually enter text, select **Text input**.

#### Contents



- Type: Select a file type to use to organize a template.
  - PIP / Videos / Image / Flash / Office / PDF
- Contents: Select a file saved in Internal Memory or a USB device.
- Size: Specify the screen size when displaying a content file on the template page.
  - Fit to screen / Lock Aspect Ratio
- **Source**: This option is enabled when **Type** is set to **PIP**.
  - Component / AV / PC / DVI / HDMI
- A template can contain a maximum of two **Videos** files.
- A template can contain only one **PIP** file.

  (If a **PIP** file is selected, only one **Videos** file can be selected.)
- An **Office** file and a PDF file cannot be contained in the same template.
- A template cannot contain more than one **Flash** file.

**5** Select sound or background music.



- If two **Videos** files are assigned, select the file with the sound you want to use.
  - If one of the video files includes **PIP** content, sound from the **PIP** content can be selected.
- If a **Flash** file is selected, it is not possible to enable the sound output from another file or the background music. (Step 5 is skipped.)
- If **Background Music** is enabled, the sound settings function in a file is not supported.

6 Select Save. Select the memory space you want to save the content to.



7 Check that the template has been added to the **Template Manager**.



## **Content manager**

#### **Copying content**

Select Content manager in the MagicInfo Premium S menu screen.



2 Select the content you want to copy.



- If content under **Internal Memory** is selected: You can copy the content under **Internal Memory** to **USB** memory.
- If content under USB is selected: You can copy the content under USB memory to Internal Memory.
  - Selecting content under **Internal Memory** and **USB** memory at the same time will disable copying.
- 3 Next, select Copy.

## **Deleting content**

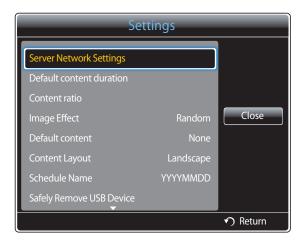
Select **Content manager** in the **MagicInfo Premium S** menu screen.



- 2 Select the content you want to delete. Next, select **Delete**.
- Content under **Internal Memory** and **USB** memory can be deleted at the same time.



## **Settings**



<sup>-</sup> The displayed image may differ depending on the model.

## **Server Network Settings**

To run MagicInfo Premium S, connect to a network.

#### Server

Enter the MagicInfo Premium S server settings.

• If the SSL option is enabled, the server is configured to use https and data transfer is encrypted.

Enter the server IP address and port number. Use 7001 as the port number. (If unable to connect to the server using port number 7001, check with your server administrator to find the correct port number and then change the port number.)

#### **FTP Mode**

Specify the FTP operating mode.

Active / Passive

#### **Default Storage**

Specify the location you want to save content (downloaded from the server) to.

- Internal Memory: Save the content to the internal memory of the product.
- **USB**: Save the content to USB memory.

If a **Network schedule** is running when USB memory is not connected, the default content will run.

#### **Default content duration**

Specify the duration to play content.

 Image Viewer Time, Doc viewing time, PPT Viewer Time, PDF viewing time, Flash viewing time

The duration must be at least 5 seconds.

#### **Content Ratio**

Specify the display aspect ratio by type when playing content.

- Image ratio, Doc Ratio, PPT Ratio, PDF Ratio, Video Ratio
  - Original: Display content with the original size.
  - Full Screen: Display content in full screen.

#### **Image Effect**

Configures the image transition effects.

• Fade1, Fade2, Blind, Spiral, Checker, Linear, Stairs, Wipe, Random, None

#### **Default content**

Specify the content to play by default when launching MagicInfo Premium S.

Content of up to 20MB is supported for **Default content**.

## **Content Layout**

Change the screen orientation to landscape or portrait view.

Landscape / Portrait

#### **Schedule Name**

Select a schedule title format when creating a local schedule.

YYYYMMDD / YYYYDDMM / DDMMYYYY

#### **Safely Remove USB Device**

Safely removes USB memory

#### **Delete all content**

Delete all the content files in Internal Memory.

#### **Reset Settings**

Restore all the values under **Settings** to the default when the product was purchased.

## When Content is Running

## Viewing the details of the content that is running



<sup>-</sup> The displayed image may differ depending on the model.

Press the **INFO** button on the remote control.

- **Software Version**: Displays the software version of a device
- Device Name: Displays the name of a device recognized by the server
- **Device ID**: Displays the original identification number of a device
- Mode: Displays the current operating mode
  (Network schedule, Local schedule, Template Player, Internal Auto Play or USB Device Auto Play) of MagicInfo
  Premium S Player
- Server: Displays the connection status (Connected, Disconnected or Not approved) of the server
- **USB**: Displays the connection status of a USB device
- Schedule download: Displays the progress of a network schedule being downloaded from the server

#### Changing the settings for the content that is running



<sup>-</sup> The displayed image may differ depending on the model.

Press the **TOOLS** button on the remote control.

You can change the **Picture Mode** or **Sound Mode** setting or safely remove a USB device (**Safely Remove USB Device**) while content is playing by pressing the **TOOLS** button on the remote control.

- Picture Mode (Dynamic / Standard / Natural / Movie)
   Customizes the screen settings for the content currently playing
- Sound Mode (Standard / Music / Movie / Clear Voice / Amplify)
  Customizes the audio settings for the content currently playing
- PIP (Off / On)
   Activate or deactivate the PIP function.
- Background Music (Off / On)
   Activate or deactivate the Background Music function.
- Background Music Setting (Shuffle / Play / Cancel / Deselect)
   Set music files saved in the Internal Memory as Background Music.

To enable the **Background Music Setting**, make sure at least one MP3 file is saved in **Internal Memory**.

 Safely Remove USB Device Safely removes USB memory

## Chapter 13 MagicInfo Videowall S

 To launch MagicInfo Videowall S, select MagicInfo Videowall S for the Play Mode on the System. A licence needs to be purchased to use MagicInfo Videowall S.

To download the software, go to the Samsung homepage at http://www.samsunglfd.com.

To purchase a licence, contact a Customer Server Centre.

## File Formats Compatible with MagicInfo Videowall S Player

## Read before using MagicInfo Videowall S Player

MagicInfo Videowall S can only configure and control content files via VideoWall Console.

- Refer to the **VideoWall Console** user manual for further details.
- To display the menu selection window, press **RETURN** on the remote control.

See <u>page 165</u> for further details on supported codecs.

Video Image

- 3D video is not supported.
- Content with a resolution larger than the resolution specified in the table above is not supported.
- Video content with a Bit rate or Frame rate larger than the rate specified in the table above can cause choppy video during playback.
- Video content will not play, or not play correctly, if there is an error in the content or the container.
- Some USB/digital camera devices may not be compatible with the player.
- Supports up to H.264, Level 4.1
- H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- For all Video codecs except MVC, VP8, VP6:
  - Below 1280 x 720: 60 frame max
  - Above 1280 x 720: 30 frame max
- GMC 2 or higher is not supported.
- Supports only BD MVC Spec.

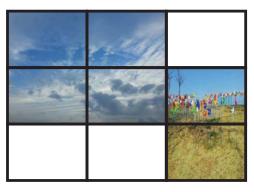
- Compatible image file format : Jpeg, bmp, png
- Supported maximum resolution: 15,360 x 8,640
  - A higher resolution image may take longer to display on the screen.

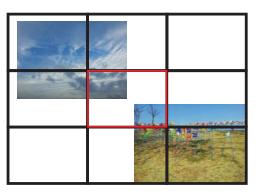
## Restrictions

- Only one video (Videos) file can be played per client.
  - Different content files can be played on the displays of a video wall.

    Two video (Videos) files cannot be played on a single display of a video wall.







Available Available Not available

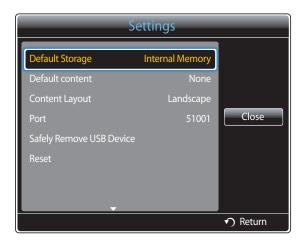
# **MagicInfo Videowall S**

 $\begin{tabular}{ll} MENU & \longrightarrow Support \to Contents Home \to MagicInfo Videowall S \to ENTER & \longrightarrow RETURN \checkmark ) \\ \end{tabular}$ 

To launch MagicInfo Videowall S, select MagicInfo Videowall S for the Play Mode on the System.

Press the **MagicInfo Lite/S** button on the remote control.

#### Settings



<sup>-</sup> The displayed image may differ depending on the model.

#### **Default Storage**

Specify the location you want to save content (downloaded from the server) to.

- Internal Memory: Save the content to the internal memory of the product.
- External: Save the content to USB memory.

#### **Default content**

Configure the settings for the content that will play by default.

#### **Content Layout**

Change the screen orientation to landscape or portrait view.

Landscape / Portrait

#### **Port**

View the port number of the server. Use 51001 as the port number.

• If unable to connect to the server using port number 51001, check with your server administrator to find the correct port number and then change the port number.

#### **Safely Remove USB Device**

Safely removes USB memory

#### Reset

Restore all the values under **Settings** to the default when the product was purchased.

# When Content is Running



<sup>-</sup> The displayed image may differ depending on the model.

Press the **INFO** button on the remote control.

- **Software Version**: Displays the software version of a device
- **Device Name**: Displays the name of a device recognized by the server
- **Device ID**: Displays the original identification number of a device
- **USB**: Displays the connection status of a USB device

# Chapter 14 Troubleshooting Guide

Before calling Samsung Customer Service Centre, test your product as follows. If the problem persists, contact Samsung Customer Service Centre.

If the screen remains blank, check the PC system, video controller and cable.

# **Requirements Before Contacting Samsung Customer Service Centre**

#### **Testing the Product**

Check if your product is operating normally by using the product test function.

If the screen remains blank while the power LED blinks even when the product is correctly connected to a PC, perform product testing.

- Power off both the PC and product.
- 2 Disconnect all the cables from the product.
- **3** Power on the product.
- 4 If No Signal is displayed, the product is operating normally.

#### **Checking the Resolution and Frequency**

**Not Optimum Mode** will briefly be displayed if a mode that exceeds a supported resolution is selected (refer to Supported Resolutions).

# Check the followings.

### Installation issue (PC mode)

The screen keeps switching on and off.	Check the cable connection between the product and PC, and ensure the connection is secure.	
Blank spaces are found on all four sides of the screen when	The blank spaces found on the screen have nothing to do with the product.	
an HDMI or HDMI-DVI cable is connected to the product and PC.	Blank spaces on the screen are caused by the PC or graphics card. To resolve the problem, adjust the screen size in the HDMI or DVI settings for the graphics card.	
	If the graphics card settings menu does not have an option to adjust the screen size, update the graphics card driver to the latest version.	
	(Please contact the graphics card or computer manufacturer for further details about how to adjust the screen settings.)	
PC is shown in Source when a PC is not connected.	PC is always shown in Source irrespective of whether or not a PC is connected.	

#### Screen issue

The power LED is off. The screen will not switch on.	Make sure that the power cord is connected.	
No Signal is displayed on the screen (refer to "Connecting to	Check that the product is connected correctly with a cable	
a PC").	Check that the device connected to the product is powered on.	
Not Optimum Mode is displayed.	This message is displayed when a signal from the graphics card exceeds the product's maximum resolution and frequency.	
	Refer to the Standard Signal Mode Table and set the maximum resolution and frequency according to the product specifications.	
The images on the screen look distorted.	Check the cable connection to the product	

#### Screen issue

The screen is not clear. The screen is blurry.	Adjust Coarse and Fine.	
	Remove any accessories (video extension cable, etc) and try again.	
	Set the resolution and frequency to the recommended level.	
The screen appears unstable and shaky.	Check that the resolution and frequency of the PC and graphics card are set within a range compatible with the product. Then, change the screen settings if required by referring to the Additional	
There are shadows or ghost images left on the screen.	Information on the product menu and the Standard Signal Mode Table.	
The screen is too bright. The screen is too dark.	Adjust Brightness and Contrast.	
Screen colour is inconsistent.	Go to <b>Picture</b> and adjust the <b>Colour Space</b> settings.	
White does not really look white.	Go to <b>Picture</b> and adjust the <b>White Balance</b> settings.	
There is no image on the screen and the power LED blinks	The product is in power-saving mode.	
every 0.5 to 1 second.	Press any key on the keyboard or move the mouse to return to the previous screen.	
The product will turn off automatically.	Go to <b>System</b> and make sure <b>Sleep Timer</b> is set to <b>Off</b> .	
	If a PC is connected to the product, check the power status of the PC.	
	Make sure the power cable is connected properly to the product and power outlet.	
	If the signal from a connected device is not detected, the product automatically turns off after 10 to 15 minutes.	
Picture quality of the product is different from the dealer shop where it was purchased.	Use an HDMI cable to obtain high-definition (HD) picture quality.	

#### Screen issue

The screen display does not look normal.	Encoded video content may cause the display to appear corrupted in scenes featuring fast moving objects such as in a sports event or action video.		
	Low signal level or low picture quality may cause the display to appear corrupted. This does not mean the product is defective.		
	A cell phone within a distance of one-meter radius may cause static on analogue and digital products.		
The brightness and colour do not look normal.	Go to <b>Picture</b> and adjust the screen settings such as <b>Picture Mode, Colour, Brightness</b> and <b>Sharpness</b> .		
	Refer to page 91 for details about the <b>Picture</b> menu.		
	Go to <b>System</b> and adjust the <b>Energy Saving</b> settings.		
	Refer to page 123 for details about the <b>System</b> menu.		
	Reset the screen settings to the default settings.		
	Refer to page 105 for details about the <b>Reset Picture</b> menu.		
Broken lines are displayed on the edges of the screen.	If Picture Size is set to Screen Fit, change the setting to 16:9.		
Lines (red, green or blue) are displayed on the screen.	These lines are displayed when there is a defect in DATA SOURCE DRIVER IC on the monitor. Contact a Samsung Service Centre to resolve the issue.		
The display looks unstable and then freezes.	The screen may freeze when a resolution other than the recommended resolution is used or if the signal is not stable. To resolve the issue, change the PC resolution to the recommended resolution		
The screen cannot be displayed in full screen.	A scaled SD (4:3) content file can cause black bars on both sides of an HD channel screen.		
	A video with an aspect ratio different from the product can cause black bars at the top and bottom of the screen.		
	Change the screen size setting to full screen on the product or source device.		

#### Sound issue

There is no sound.	Check the connection of the audio cable or adjust the volume.	
	Check the volume.	
The volume is too low.	Adjust the volume.	
	If the volume is still low after turning it up to the maximum level, adjust the volume on your PC sound card or software programmeme.	
Video is available but there is no sound.	If an HDMI cable is connected, check the audio output settings on the PC.	
	Go to <b>Sound</b> and change <b>Speaker Select</b> to <b>Internal</b> .	
	If a source device is used	
	Make sure the audio cable is properly connected to the audio input port on the product.	
	Check the audio output settings for the source device.	
	(For example, if an HDMI cable is connected to the monitor, the audio setting for the cable box may need to be changed to HDMI.)	
	If a DVI-HDMI cable is used, a separate audio cable is required.	
	If the product has a headphone port, make sure nothing is connected to it.	
	Reconnect the power cable to the device and then reboot the device.	
There is static coming from the speakers.	Check the cable connection. Make sure a video cable is not connected to an audio input port.	
	Check the signal strength after connecting a cable.	
	Low signal level can cause corrupted sound.	

Sound issue	
There is audible sound when the volume is muted.	When <b>Speaker Select</b> is set to <b>External</b> , the volume button and mute function are disabled.
	Adjust the volume for the external speakers.
	Audio settings for main speakers are separate from the internal speakers on the product.
	Changing or muting the volume on the product does not affect an external amplifier(decoder).
Sound from the monitor does not change after Sound Mode	Audio settings for main speakers are separate from the internal speakers on the product.
is changed.	Audio settings on a source device do not affect the internal speaker settings on the product.
There is an echo sound coming from the speakers.	Different decoding speeds between the product speakers and external speakers can cause an echo.
	In this case, set <b>Speaker Select</b> to <b>External</b> .
Remote control issue	
Remote control issue	
	Make sure that the batteries are correctly in place (+/-).
Remote control issue  The remote control does not work.	Make sure that the batteries are correctly in place (+/-).  Check if the batteries are flat.
	Check if the batteries are flat.
	Check if the batteries are flat.  Check for power failure.
	Check if the batteries are flat.  Check for power failure.  Make sure that the power cord is connected.

#### Other issue

The product smells like plastic.	The plastic smell is normal and disappears over time.  Remove and then attach the stand again to the product.	
The monitor appears tilted.		
Audio or video cuts out intermittently.	Check the cable connection and connect it again if required.	
	Using a very hard or thick cable may corrupt audio and video files.	
	Make sure cables are flexible enough to ensure durability. When mounting the product onto a wall, it is recommended to use right-angle cables.	
Small particles are found on the edges of the product.	The particles are part of the product design. The product is not defective.	
The PIP menu is not available.	The menu is enabled or disabled depending on the <b>Source</b> mode.	
	Refer to page 125 for details about the <b>PIP</b> menu.	
When I try to change the PC resolution, a message "The defined resolution is not supported." appears.	The message "The defined resolution is not supported." appears if the input source resolution exceeds the maximum resolution of the display.	
	To resolve the issue, change the PC resolution to a resolution supported on the display.	
There is no sound from the speakers in HDMI mode when a	DVI cables do not transmit sound data.	
DVI-HDMI cable is connected.	Make sure to connect the audio cable to the correct input jack to enable audio.	
HDMI Black Level is not functioning properly on an HDMI device with YCbCr output.	This function is available only when a source device, such as a DVD player and STB, is connected to the product via an HDMI (RGB signal) cable.	

Other	iccua
Other	issue

There is no sound in HDMI mode.	Displayed picture colours may not look normal. Video or sound may not be available. This can occur if a source device that only supports an older version of the HDMI standard is connected to the product. If these issues occur, connect an audio cable along with the HDMI cable.  Some PC graphics cards may not automatically recognize HDMI signals that do not include sound. In this case, manually select a sound input.						
						Sound input	Screen mode
					PC	Auto	PC settings
	DVI PC	Audio In(Stereo ports)	PC settings				
The IR sensor is not functioning.	Make sure the sensor	light turns on when a button is pressed	on the remote control.				
	If the sensor light does not turn on, turn the power switch off and then on again on the back of the product.    The sensor light does not turn on, turn the power switch off and then on again on the back of the product.   The sensor light does not turn on, turn the power switch off and then on again on the back of the product.						
	If the sensor lig	Dlights up red when the screen is switche ht still does not turn on after the power s By be disconnected.					
	Contact your nearest service centre to have the product serviced.						
	If the sensor lig the IR sensor m	ht that is on does not flash red when a bu ay be defective.	utton is pressed on the remote control,				
	Contact your ne	earest service centre to have the product	serviced.				
		ange on the screen when a button is pre hes red, the mainboard may be defective	_				
	Contact your ne	earest service centre to have the product	serviced.				

# Q&A

Refer to the user manual for your PC or graphics card for further instructions on

adjustment.

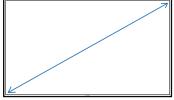
Question	Answer  Set the frequency on your graphics card.	
How can I change the frequency?		
	<ul> <li>Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings.</li> </ul>	
	<ul> <li>Windows ME/2000: Go to Control Panel → Display → Settings → Advanced → Monitor and adjust the frequency in Monitor Settings.</li> </ul>	
	<ul> <li>Windows Vista: Go to Control Panel → Appearance and Personalization → Personalize →         Display Settings → Advanced Settings → Monitor and adjust the frequency in Monitor         Settings.</li> </ul>	
	<ul> <li>Windows 7: Go to Control Panel → Appearance and Personalization → Display → Adjust resolution → Advanced Settings → Monitor and adjust the frequency in Monitor Settings.</li> </ul>	
	<ul> <li>Windows 8: Go to Settings → Control Panel → Appearance and Personalization → Display         → Adjust resolution → Advanced Settings → Monitor and adjust the frequency in Monitor         Settings.</li> </ul>	
How can I change the resolution?	<ul> <li>Windows XP: Go to Control Panel → Appearance and Themes → Display → Settings and adjust the resolution.</li> </ul>	
	<ul> <li>Windows ME/2000: Go to Control Panel → Display → Settings and adjust the resolution.</li> </ul>	
	<ul> <li>Windows Vista: Go to Control Panel → Appearance and Personalization → Personalize →         Display Settings and adjust the resolution.</li> </ul>	
	<ul> <li>Windows 7: Go to Control Panel → Appearance and Personalization → Display → Adjust Resolution and adjust the resolution.</li> </ul>	
	<ul> <li>Windows 8: Go to Settings → Control Panel → Appearance and Personalization → Display</li> <li>→ Adjust Resolution and adjust the resolution.</li> </ul>	

227

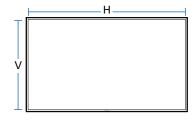
Question	Answer	
How do I set powersaving mode?	<ul> <li>Windows XP: Set power-saving mode in Control Panel → Appearance and Themes → Display</li> <li>→ Screen Saver Settings or BIOS SETUP on the PC.</li> </ul>	
	<ul> <li>Windows ME/2000: Set power-saving mode in Control Panel → Display → Screen Saver Settings or BIOS SETUP on the PC.</li> </ul>	
	<ul> <li>Windows Vista: Set power-saving mode in Control Panel → Appearance and Personalization</li> <li>→ Personalize → Screen Saver Settings or BIOS SETUP on the PC.</li> </ul>	
	<ul> <li>Windows 7: Set power-saving mode in Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.</li> </ul>	
	<ul> <li>Windows 8: Set power-saving mode in Settings → Control Panel → Appearance and Personalization → Personalize → Screen Saver Settings or BIOS SETUP on the PC.</li> </ul>	

# Chapter 15 Specifications

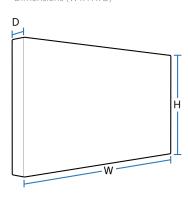




2 Display area



<sup>3</sup> Dimensions ( $W \times H \times D$ )



# General

Model Nar	me	MD32C	MD40C
Panel	Size	32 CLASS (31.5 inches / 80 cm)	40 CLASS (40.0 inches / 101 cm)
	Display area	698.4 mm (H) x 392.85 mm (V) / 27.5 inches (H) x 15.5 inches (V)	885.6 mm (H) x 498.15 mm (V) / 34.9 inches (H) x 19.6 inches (V)
Dimensions (\	W x H x D)	736.0 x 436.0 x 93.5 mm / 29 x 17.2 x 3.7 inches	925.4 x 542.6 x 93.5 mm /36.4 x 21.4 x 3.7 inches
Weight (with	out stand)	6.4 kg / 14.1 lbs	9.8 kg / 21.6 lbs
VESA		200 mm $\times$ 200 mm / 7.9 inches $\times$ 7.9 inches	200 mm $\times$ 200 mm $/$ 7.9 inches $\times$ 7.9 inches

Model Name		MD46C	MD55C	
Panel	Size	46 CLASS (45.9 inches / 116 cm)	55 CLASS (54.6 inches / 138 cm)	
	Display area	1018.08 mm (H) x 572.67 mm (V) / 40.1 inches (H) x 22.5 inches (V)	1209.6 mm (H) x 680.4 mm (V) / 47.6 inches (H) x 26.8 inches (V)	
Dimensions (W x H x D)		1057.8 x 617.0 x 94.5 mm / 41.6 x 24.3 x 3.72 inches	1248.7 x 724.2 x 94.5 mm / 49.2 x 28.5 x 3.72 inches	
Weight (witho	ut stand)	12.6 kg / 27.8 lbs	18.5 kg / 40.8 lbs	
VESA		400 mm × 400 mm / 15.7 inches x 15.7 inches	400 mm × 400 mm / 15.7 inches x 15.7 inches	

Display Colour		MD32C / MD40C / MD46C: 1.07B(10bits Dithering)		
		MD55C: 16.7M (8Bits Dithering)		
Synchronization	Horizontal	30~81 kHz		
	Frequency			
	Vertical	56~75Hz		
	Frequency			
Resolution	Optimum	1920x1080@60Hz		
	resolution			
	Maximum	1920x1080@60Hz		
	resolution			
Maximum Pixel Clo	:k	148.5MHz (Analog,Digital)		
Power Supply		AC 100 to 240 VAC (+/- 10%), 60 / 50Hz $\pm$ 3Hz. Refer to the label at the back of the product as the standard voltage can vary in different countries.		
USB		1 DOWN		
Signal connectors	Input	An America Product Only Composite/Component (common), PC D-Sub, DVI, HDMI, Audio In, RJ45, RS232C In, USB1(Media Player)		
	Output	Audio Out, RS232C Out		
Environmental	Operating	Temperature : 32 °F ~ 104 °F (0 °C ~ 40 °C)		
considerations		Humidity : 10 % $\sim$ 80 %, non-condensing		
	Storage	Temperature : -4 °F ~ 140 °F (-20 °C ~ 45 °C)		

— Plug-and-Play

This monitor can be installed and used with any Plug-and-Play compatible systems. Two-way data exchange between the monitor and PC system optimizes the monitor settings.

Monitor installation takes place automatically. However, you can customize the installation settings if desired.

Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may appear brighter or darker on the panel. This does not affect product performance.

This device is a Class A digital apparatus.

#### [Recommendation] - EU Only



- Hereby, Samsung Electronics, declares that this Monitor is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
- The official Declaration of Conformity may be found at http://www.samsung.com, go to Support > Search Product Support and enter the model name.
- This equipment may be operated in all EU countries.

#### (USA only)

Dispose unwanted electronics through an approved recycler.

To find the nearest recycling location, go to our website:

www.samsung.com/recyclingdirect or call, (877) 278 - 0799

### **PowerSaver**

The power-saving function of this product reduces power consumption by switching off the screen and changing the colour of the power LED if the product is not used for a specified period of time. The power is not turned off in power-saving mode. To switch the screen back on, press any key on the keyboard or move the mouse. Power-saving mode only functions when the product is connected to a PC with a power-saving function.

PowerSaver		Normal O	peration		Power saving mode Power off		Power off (Power Button off)
		Rating T		g Typical Max	_		
Power Indicator		Off			Blinking	On	Off
Power Consumption	MD32C	70 Watts	47 Watts	77 Watts	0.5 Watts	0.5 Watts	0 Watts
	MD40C	100 Watts	58 Watts	110 Watts	_		
	MD46C	110 Watts	65 Watts	121 Watts	_		
	MD55C	150 Watts	86 Watts	165 Watts	_		

The displayed power consumption level can vary in different operating conditions or when settings are changed.

<sup>—</sup> SOG(Sync On Green) is not supported.

To reduce the power consumption to 0, turn off the switch at the back or disconnect the power cord. Disconnect the power cable if you will not be using the product for an extended period of time (during vacation, etc.).

Horizontal Frequency
 The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal

frequency is measured in kHz.

Vertical Frequency
 The product displays a single image multiple times per second (like a fluorescent light) to display what the viewer sees. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate.

 Vertical frequency is measured in Hz.

# **Preset Timing Modes**

Dagal......

This product can be set to only one resolution for each screen size to obtain the optimum picture quality due to the nature of the panel. Using a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your product.

Check the frequency when you exchange a CDT product (connected to a PC) for an LCD product. If the LCD product does not support 85Hz, change the vertical frequency to 60Hz using the CDT product before you exchange it with the LCD product.

The screen will automatically be adjusted if a signal that belongs to the following standard signal modes is transmitted from your PC. If the signal transmitted from the PC does not belong to the standard signal modes, the screen may be blank with the power LED on. In such a case, change the settings according to the following table by referring to the graphics card user manual.

Divid Clark

Come a Della vita e

Having stal Evenues av. Martinal Evenues av.

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
IBM, 720 x 400	31.469	70.087	28.322	-/+
MAC, 640 x 480	35.000	66.667	30.240	-/-
MAC, 832 x 624	49.726	74.551	57.284	-/-
MAC, 1152 x 870	68.681	75.062	100.000	-/-
VESA, 640 x 480	31.469	59.940	25.175	-/-
VESA, 640 x 480	37.861	72.809	31.500	-/-
VESA, 640 x 480	37.500	75.000	31.500	-/-
VESA, 800 x 600	35.156	56.250	36.000	+/+
VESA, 800 x 600	37.879	60.317	40.000	+/+
VESA, 800 x 600	48.077	72.188	50.000	+/+
VESA, 800 x 600	46.875	75.000	49.500	+/+
VESA, 1024 x 768	48.363	60.004	65.000	-/-

Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
VESA, 1024 x 768	56.476	70.069	75.000	-/-
VESA, 1024 x 768	60.023	75.029	78.750	+/+
VESA, 1152 x 864	67.500	75.000	108.000	+/+
VESA, 1280 x 720	45.000	60.000	74.250	+/+
VESA, 1280 x 800	49.702	59.810	83.500	-/+
VESA, 1280 x 1024	63.981	60.020	108.000	+/+
VESA, 1280 x 1024	79.976	75.025	135.000	+/+
VESA, 1366 x 768	47.712	59.790	85.500	+/+
VESA,1440 x 900	55.935	59.887	106.500	-/+
VESA,1600 x 900	60.000	60.000	108.000	+/+
VESA,1680 x 1050	65.290	59.954	146.250	-/+
VESA,1920 x 1080	67.500	60.000	148.500	+/+

# Chapter 16 Appendix

# **Contact SAMSUNG WORLD WIDE**

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

#### **NORTH AMERICA**

U.S.A	1-800-SAMSUNG(726-7864)	http://www.samsung.com
CANADA	1-800-SAMSUNG(726-7864)	http://www.samsung.com/ca (English) http://www.samsung.com/ca_fr (French)
MEXICO	01-800-SAMSUNG(726-7864)	http://www.samsung.com

#### **LATIN AMERICA**

ARGENTINE	0800-333-3733	http://www.samsung.com
BOLIVIA	800-10-7260	http://www.samsung.com
BRAZIL	0800-124-421 4004-0000	http://www.samsung.com
CHILE	800-SAMSUNG(726-7864) From mobile 02-24 82 82 00	http://www.samsung.com/cl

#### LATIN AMERICA

COLOMBIA	01-8000112112	http://www.samsung.com/co
	Bogotá: 6001272	
COSTA RICA	0-800-507-7267	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
OOMINICA	1-800-751-2676	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
CUADOR	1-800-10-7267	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
EL SALVADOR	800-6225	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
GUATEMALA	1-800-299-0013	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
HONDURAS	800-27919267	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
AMAICA	1-800-234-7267	http://www.samsung.com
NICARAGUA	00-1800-5077267	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
PANAMA	800-7267	http://www.samsung.com/latin (Spanish)
		http://www.samsung.com/latin_en (English)
PARAGUAY	98005420001	http://www.samsung.com
PERU	0-800-777-08 (Only from landline)	http://www.samsung.com
	336-8686 (From HHP & landline)	

#### **LATIN AMERICA**

PUERTO RICO	1-800-682-3180	http://www.samsung.com
TRINIDAD & TOBAGO	1-800-SAMSUNG(726-7864)	http://www.samsung.com
URUGUAY	40543733	http://www.samsung.com
VENEZUELA	0-800-100-5303	http://www.samsung.com

#### **EUROPE**

AUSTRIA	0810 - SAMSUNG (7267864, € 0.07/min)	http://www.samsung.com
BELGIUM	02-201-24-18	http://www.samsung.com/be (Dutch) http://www.samsung.com/be_fr (French)
BOSNIA	051 133 1999	http://www.samsung.com
BULGARIA	07001 33 11 , normal tariff	http://www.samsung.com
CROATIA	062 SAMSUNG (062 726 786)	http://www.samsung.com
CYPRUS	8009 4000 only from landline (+30) 210 6897691 from mobile and land line	http://www.samsung.com
CZECH	800 - SAMSUNG (800-726786)  Samsung Electronics Czech and Slovak, s.r.o., Oasis Florenc, Sokolovská 394/17, 180 00, Praha 8 till 8.2.2013 . From 8.2.2013: Samsung Electronics Czech and Slovak, s.r.o. V Parku 2343/24, 148 00 - Praha 4	http://www.samsung.com
DENMARK	70 70 19 70	http://www.samsung.com
EIRE	0818 717100	http://www.samsung.com
ESTONIA	800-7267	http://www.samsung.com/ee

#### **EUROPE**

FINLAND	030-6227 515	http://www.samsung.com
FRANCE	01 48 63 00 00	http://www.samsung.com/fr
GERMANY	0180 5 SAMSUNG bzw.	http://www.samsung.com
	0180 5 7267864* (*0,14 €/Min. aus dem dt. Festnetz, aus dem Mobilfunk max. 0,42 €/Min.)	
GREECE	80111-SAMSUNG (80111 726 7864) only from land line	http://www.samsung.com
	(+30) 210 6897691 from mobile and land line	
HUNGARY	06-80-SAMSUNG(726-7864)	http://www.samsung.com
ITALIA	800-SAMSUNG(726-7864)	http://www.samsung.com
LATVIA	8000-7267	http://www.samsung.com/lv
LITHUANIA	8-800-77777	http://www.samsung.com/lt
LUXEMBURG	261 03 710	http://www.samsung.com
MONTENEGRO	020 405 888	http://www.samsung.com
NETHERLANDS	0900-SAMSUNG (0900-7267864) (€ 0,10/Min)	http://www.samsung.com
NORWAY	815 56480	http://www.samsung.com
POLAND	0 801-1SAMSUNG(172-678) *	http://www.samsung.com/pl
	lub +48 22 607-93-33 **	
	* (całkowity koszt połączenia jak za 1 impuls według taryfy operatora)	
	** (koszt połączenia według taryfy operatora)	
PORTUGAL	808 20-SAMSUNG(808 20 7267)	http://www.samsung.com

#### **EUROPE**

ROMANIA	08008 SAMSUNG (08008 726 7864)	http://www.samsung.com
	TOLL FREE No.	
SERBIA	+381 11 321 6899	http://www.samsung.com
	(old number still active 0700 7267864)	
SLOVAKIA	0800 - SAMSUNG(0800-726 786)	http://www.samsung.com
SPAIN	902 - 1 - SAMSUNG (902 172 678)	http://www.samsung.com
SWEDEN	0771 726 7864 (SAMSUNG)	http://www.samsung.com
SWITZERLAND	0848 - SAMSUNG(7267864, CHF 0.08/min)	http://www.samsung.com/ch (German)
		http://www.samsung.com/ch_fr (French)
U.K	0330 SAMSUNG (7267864)	http://www.samsung.com

#### CIS

ARMENIA	0-800-05-555	http://www.samsung.com
AZERBAIJAN	088-55-555	http://www.samsung.com
BELARUS	810-800-500-55-500	http://www.samsung.com
GEORGIA	0-800-555-555	http://www.samsung.com
KAZAKHSTAN	8-10-800-500-55-500(GSM: 7799)	http://www.samsung.com
KYRGYZSTAN	00-800-500-55-500	http://www.samsung.com
MOLDOVA	0-800-614-40	http://www.samsung.com
MONGOLIA	+7-800-555-55-55	http://www.samsung.com

#### CIS

RUSSIA	8-800-555-55	http://www.samsung.com
TADJIKISTAN	8-10-800-500-55-500	http://www.samsung.com
UKRAINE	0-800-502-000	http://www.samsung.com/ua (Ukrainian) http://www.samsung.com/ua_ru (Russian)
UZBEKISTAN	8-10-800-500-55-500	http://www.samsung.com

#### ASIA PACIFIC

AUSTRALIA	1300 362 603	http://www.samsung.com
CHINA	400-810-5858	http://www.samsung.com
HONG KONG	(852) 3698 4698	http://www.samsung.com/hk (Chinese) http://www.samsung.com/hk_en (English)
INDIA	1800 3000 8282 1800 266 8282	http://www.samsung.com/in
NDONESIA	0800-112-8888 021-5699-7777	http://www.samsung.com/id
JAPAN	0120-327-527	http://www.samsung.com
MALAYSIA	1800-88-9999	http://www.samsung.com/my
NEW ZEALAND	0800 SAMSUNG (0800 726 786)	http://www.samsung.com

#### ASIA PACIFIC

PHILIPPINES	1-800-10-SAMSUNG(726-7864) for PLDT	http://www.samsung.com/ph
	1-800-3-SAMSUNG(726-7864) for Digitel	
	1-800-8-SAMSUNG(726-7864) for Globe	
	02-5805777	
SINGAPORE	1800-SAMSUNG(726-7864)	http://www.samsung.com
TAIWAN	0800-329-999	http://www.samsung.com
	0266-026-066	
THAILAND	1800-29-3232	http://www.samsung.com/th
	02-689-3232	
VIETNAM	1 800 588 889	http://www.samsung.com

#### **MENA**

BAHRAIN	8000-4726	http://www.samsung.com/ae (English)
		http://www.samsung.com/ae_ar (Arabic)
EGYPT	08000-726786	http://www.samsung.com
RAN	021-8255	http://www.samsung.com
JORDAN	800-22273 065777444	http://www.samsung.com/Levant (English)
KUWAIT	183-2255 (183-CALL)	http://www.samsung.com/ae (English) http://www.samsung.com/ae_ar (Arabic)
MOROCCO	080 100 2255	http://www.samsung.com

#### MENA

OMAN	800-SAMSUNG(726-7864)	http://www.samsung.com/ae (English)
		http://www.samsung.com/ae_ar (Arabic)
QATAR	800-2255 (800-CALL)	http://www.samsung.com/ae (English)
		http://www.samsung.com/ae_ar (Arabic)
SAUDI ARABIA	9200-21230	http://www.samsung.com/sa (Arabic)
SYRIA	18252273	http://www.samsung.com/Levant (English)
ΓURKEY	444 77 11	http://www.samsung.com
U.A.E	800-SAMSUNG (726-7864)	http://www.samsung.com

#### **AFRICA**

ANGOLA	91-726-7864	http://www.samsung.com
BOTSWANA	0800-726-000	http://www.samsung.com
CAMEROON	7095- 0077	http://www.samsung.com
COTE D'IVOIRE	8000 0077	http://www.samsung.com
GHANA	0800-10077 0302-200077	http://www.samsung.com
KENYA	0800 545 545	http://www.samsung.com
NAMIBIA	8197267864	http://www.samsung.com
NIGERIA	0800-726-7864	http://www.samsung.com
SENEGAL	800-00-0077	http://www.samsung.com

#### **AFRICA**

SOUTH AFRICA	0860-SAMSUNG (726-7864)	http://www.samsung.com
TANZANIA	0685 88 99 00	http://www.samsung.com
UGANDA	0800 300 300	http://www.samsung.com
ZAMBIA	211350370	http://www.samsung.com

# Responsibility for the Pay Service (Cost to Customers)

When the service is requested, in spite of in warranty, we may charge you for a visit from a service technician in the following cases.

#### Not a product defect

Cleaning of the product, Adjustment, Explanation, Re-installation and etc.

- If a service technician gives instructions on how to use product or simply adjusts options without disassembling product.
- If a defect is caused by external environmental factors (Internet, Antenna, Wired Signal, etc.)
- If a product is reinstalled or devices are connected additionally after installing the purchased product for the first time
- If a product is reinstalled to move to a different spot or to move to a different house.
- If customer requests instructions on how to use because of another company's product.
- If customer requests instructions on how to use the network or another company's programmeme.
- If customer requests software installation and setup for the product.
- If a service technician removes/cleans dusts or foreign materials inside of the product.
- If customer requests an installation additionally after purchasing a product through home-shopping
  or online.

#### A Product damage caused by customer's fault

Product damage caused by customer's mishandling or wrong repair

If a product damage is caused by;

- External impact or drop.
- Use of supplies or separatly sold product unspecified by Samsung.
- Repair from a person besides an engineer of outsourcing service company or partner of Samsung Electronics Co., Ltd.
- Remodeling or repairing the product by customer.
- Using it with incorrect voltage or non-authorised electrical connections.
- Not following the "cautions" in User Manual.

#### **Others**

- If product fails by natural disaster. (lightning, fire, earthquake, flood damage, etc)
- If consumable components are all used up. (Battery, Toner, Fluorescent lights, Head, Vibrator, Lamp, Filter, Ribbon, etc.)

If customer requests a service in case the product has no defect, service fee may be charged. So please read User Manual first.

#### **WEEE**

#### **Correct Disposal of This Product (Waste Electrical & Electronic Equipment)**



(Applicable in countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

#### Correct disposal of batteries in this product



(Applicable in countries with separate collection systems)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66.

If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

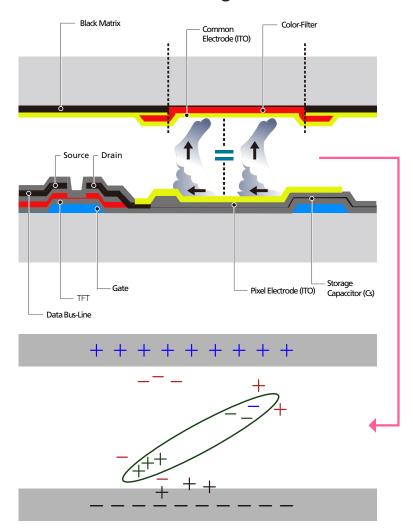
To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

# **Optimum Picture Quality and Afterimage Burn-in Prevention**

#### **Optimum Picture Quality**

- To enjoy the optimum picture quality, go to Control Panel on your PC and adjust the resolution and refresh rate as follows. The picture quality of TFT-LCDs may degrade if the optimum resolution is not selected.
  - Resolution: 1920 x 1080
  - Vertical frequency (refresh rate): 56 ~ 75 Hz
     Screen refresh rate: refers to the number of times a display image is refreshed per second.
- Due to the nature of the manufacturing of this product, approximately 1 pixel per million (1ppm) may be brighter or darker on the panel. This does not affect product performance.
  - The number of sub-pixels by panel type: 6,220,800
- Run Auto Adjustment to improve the picture quality. If noise is still found even after auto adjustment, adjust Coarse or Fine.
- · Leaving the screen fixed on a stationary image for an extended period of time may cause afterimage burn-in or defective pixels.
  - Activate power-saving mode or a dynamic screen saver if you will not be using the product for an extended period of time.
- Unlike CDT monitors, TFT-LCD monitors (due to the nature of the panel) can be set to only one resolution to obtain the optimum picture quality. Therefore, setting a resolution other than the specified resolution may degrade the picture quality. To avoid this, it is recommended that you select the optimum resolution specified for your monitor.

#### **Prevention of Afterimage Burn-in**



#### What is afterimage burn-in?

Afterimage burn-in should not occur when the LCD panel is operating normally. Normal operation refers to a continuously changing video pattern. If the LCD panel displays a fixed pattern for an extended period of time (more than 12 hours), a slight voltage difference may occur between the electrodes in pixels that control the liquid crystals.

Such a voltage difference between electrodes increases with time and makes the liquid crystals thinner. When this occurs, a previous image can remain on the screen when the pattern changes. To prevent this, the accumulated voltage difference should be reduced.

Afterimage burn-in should not occur when an LCD panel is operating in proper conditions.

#### Preventing afterimage burn-in

The best way to protect the product from afterimage burn-in is switching the power off or setting the PC or system to run a screen saver when not in use. Also, Warranty service may be limited depending on instruction guide.

- Powering Off, Screen Saver and Power Saving Mode
  - Power off the product for 4 hours after using it for 20 hours.
  - Power off the product for 2 hours after using it for 12 hours.
  - Go to Display Properties > Power Supply on your PC and set the product to power off as required.
  - Using a screen saver is recommended.
     It is best to use a single-colour or moving-image screen saver.
- Regular colour Change
  - Use 2 colours
     Switch between 2 colours every 30 minutes as shown above.



• Avoid combinations of a text colour and background colour of contrasting brightness.

Avoid using grey as it may contribute to afterimage burn-in.

20:30

Avoid using colours of contrasting brightness (black and white; grey).

 Brightness: refers to the lightness or darkness of a colour which varies depending on the amount of light emitted.

 FLIGHT: TIME
 FLIGHT: TIME

 OZ348: 20:30
 OZ348: 20:30

- Regular Text colour Change
  - Use bright colours of similar brightness.
     Interval: Change text colour and background colour every 30 minutes



FLIGHT: TIME

: 20:30

**OZ348** 

Regularly display a moving image along with a logo.
 Interval: Display a moving image along with a logo for 60 seconds after using for 4 hours.

FLIGHT: TIME

20:30

**OZ348** 

FLIGHT: TIME

: 20:30

**OZ348** 

#### Licence



Manufactured under licence from Dolby Laboratories.

DOLBY DIGITAL PLUS Dolby and the double-D symbol are trademarks of Dolby Laboratories.



Manufactured under a licence from U.S. Patent No's: 5,956,674, 5,974,380, 5,978,762, 6,487,535, 6,226,616, 7,212,872, 7,003,467, 7,272,567, 7,668,723, 7,392,195, 7,930,184, 7,333,929 and 7,548,853. DTS, the Symbol, and DTS and the Symbol together are registered trademarks & DTS Premium Sound | 5.1 is a trademark of DTS, Inc. ©2012 DTS, Inc. All Rights Reserved.



The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



DivX Certified ® to play DivX ® video up to HD 1080p, including premium

DivX®, DivX Certified® and associated logos are trademarks of DivX, Inc. and are used under licence.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified® device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274

#### Open Source Licence Notice

In the case of using open source software, Open Source Licences are available on the product menu. Open Source Licence Notice is written only English.

# **Terminology**

#### 480i / 480p / 720p / 1080i /

**1080p**\_\_\_\_ Each of the scanning rates above refers to the number of effective scanning lines that decides the screen resolution. The scanning rate may be indicated in i (interlaced) or p (progressive), depending on the scanning method.

- Scanning

Scanning refers to a process of sending pixels that form an image progressively. A larger number of pixels will deliver a clearer and more vivid picture.

- Progressive

In progressive scan mode, all lines of pixels are scanned one by one (progressively) on the screen.

- Interlaced

In interlaced scan mode, every other line of pixels is scanned from top to bottom first and then the remaining lines of pixels (that were not scanned) are scanned.

#### Non-interlace Mode and Interlace

Mode\_\_\_\_ Non-interlace mode (progressive scan) displays a horizontal line from the top to the bottom of a screen progressively. Interlace mode displays the odd number lines first and the even number lines next. Non-interlace mode is mainly used in monitors as it produces screen clarity and interlace mode is mainly used in TVs.

**Dot Pitch**\_\_\_\_ The screen consist of red, green and blue dots. A shorter distance between the dots produces a higher resolution. Dot pitch refers to the distance between the shortest distance between dots of the same colour. Dot pitch is measured in millimeters.

**Vertical Frequency**\_\_\_\_ The product displays a single image many times per second (like a fluorescent light that flickers) to display an image for a viewer to see. The rate of a single image being displayed repeatedly per second is called vertical frequency or refresh rate. Vertical frequency is measured in Hz. E.g. 60Hz refers to a single image being displayed 60 times in one second.

Horizontal Frequency\_\_\_\_ The time required to scan a single line from the left to the right side of the screen is called a horizontal cycle. The reciprocal number of a horizontal cycle is called horizontal frequency. Horizontal frequency is measured in kHz.

**Source**\_\_\_\_ Input source refers to a video source device connected to the product such as a camcorder or video or DVD player.

Component ports (green, blue and red)\_\_\_\_ The component ports, which identify, transmit and receive contrast

identify, transmit and receive contrast signals, provide superior picture quality to any other video connection methods.

Plug & Play Plug & Play is a function that allows the automatic exchange of information between a monitor and PC to produce an optimum display environment. The product uses VESA DDC (international standard) to execute Plug & Play.

Resolution Resolution is the number of horizontal dots (pixels) and vertical dots (pixels) that form a screen. It represents the level of display detail. A higher resolution enables more data to be displayed on the screen and is useful to perform multiple tasks simultaneously.

E.g. A resolution of 1920 X 1080 consists of 1,920 horizontal pixels (horizontal resolution) and 1,080 vertical pixels (vertical resolution).

**DVD (Digital Versatile Disc)**\_\_\_\_ DVD refers to a CD-sized mass storage disk where you can save multimedia (audio, video or game) applications using MPEG-2 video compression technology.

HDMI (High Definition Multimedia Interface) \_\_\_\_ It is an interface that can be connected to a digital audio source as well as a high-definition video source by using a single cable without compression.

#### Multiple Display Control (MDC)\_\_\_\_

MDC (Multiple Display Control) is an application that allows multiple display devices to be controlled simultaneously using a PC. Communication between a PC and monitor takes place using RS232C (serial data transmission) and RJ45 (LAN) cables.